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FINAL
PHASE II SUBSURFACE INVESTIGATION
DOUGLAS AIRCRAFT COMPANY
C-6 FACILITY, PARCEL A
TORRANCE, CALIFORNIA

FOR
McDONNELL DOUGLAS REALTY COMPANY
5 JUNE 1996
K/J 954019.01
VOLUME I OF III

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1.0 EXECUTIVE SUMMARY

McDonnell Douglas Realty Company retained Kennedy/Jenks Consultants to perform a Phase II subsurface investigation of the northern section of the Douglas Aircraft Company C-6 Facility in Torrance, California. The investigation was confined to the area identified by McDonnell Douglas Realty Company as Parcel A. Specific areas for the investigation were identified in an earlier preliminary site assessment as potential areas of environmental interest.

Samples were collected from depths of up to 35 feet below ground surface from 56 borings using hollow-stem auger, hand auger, and direct push techniques. Upper interval samples from each boring were generally analyzed for Total Recoverable Petroleum Hydrocarbons or Total Petroleum Hydrocarbons as diesel, and volatile organic compounds by a mobile laboratory located onsite. Deeper interval samples were analyzed for the same parameters where upper interval samples had detectable concentrations of chemicals of interest. In general, samples were also analyzed for California Code of Regulations metals in an offsite laboratory and select samples were also tested for polychlorinated biphenyls.

Soils encountered during the investigation were predominantly silts with varying amounts of clay and sand, and with clay and sand occasionally interbedded. No groundwater water was encountered during the drilling of this field program.

The results of the Phase II investigation of Parcel A identified only a limited number of areas of environmental interest. One location in Building 37 was identified as impacted by petroleum hydrocarbons in the upper 10 feet. Four locations were identified as impacted by low concentrations of chlorinated volatile organic compounds to the total tested depth of 25 feet bgs.

Sampling at one location in Building 37 indicated a limited area impacted by polychlorinated biphenyls.

2.0 INTRODUCTION

This report summarizes the results of a Phase II subsurface investigation of a section, Parcel A, of the Douglas Aircraft Company (DAC) C-6 facility (C-6 facility) located at 19503 South Normandie Avenue in Torrance, California. The investigation was conducted by Kennedy/Jenks Consultants (Kennedy/Jenks) on behalf of McDonnell Douglas Realty Company (MDRC) in March and April 1996. The location of the C-6 facility is shown in Figure 1. A layout of the C-6 facility and an outline of Parcel A is shown in Figure 2.

2.1 Purpose and Objective

MDRC is considering development of Parcel A in the northern section of the C-6 facility. For the purpose of evaluating areas of potential environmental interest related to the development, environmental investigation work was conducted. In December 1995, MDRC retained Kennedy/Jenks to conduct a Phase I Environmental Site Assessment (PESA) of this parcel. During the performance of the PESA, Kennedy/Jenks identified 17 areas of potential environmental interest related to past or present operations within Parcel A.

The objective of this Phase II investigation was to evaluate the possibility that releases of hazardous substances could have impacted surrounding soils at the areas of potential environmental interest. The Phase II Investigation included subsurface soil sampling, monitoring for soil vapors during sampling, logging of soil types, and laboratory analysis for chemicals of interest anticipated from the PESA.

3.0 SITE DESCRIPTION

The following sections describe Parcel A, the C-6 facility history, and the regional geologic setting.

3.1 Parcel A Description

Parcel A is comprised of the northern portion of the C-6 facility located at 19503 South Normandie Avenue in Torrance, California (Figure 2). The topography of the facility is essentially flat with an elevation of approximately 50 feet above mean sea level (msl). Structures included in Parcel A include Buildings 29, 33, 34, 36, 37, 43, 57, 61, and 67, the northernmost tip of Building 1, the northern section of the employee parking lot, and the gravel yard to the east of Building 37 (Figure 2). Current operations at Parcel A consist of storage and warehousing.

Parcel A is bordered by West 190th Street on the north, South Normandie Avenue on the east, the remainder of the C-6 facility on the south, and a former metals plant (Industrial Light Metals) to the west. A railroad easement is located between the fence on the east side of Parcel A and Normandie Avenue. The surrounding properties to the north and the east consist mainly of light industrial and manufacturing facilities and office buildings. The Industrial Light Metals plant is presently being demolished. Activities at the C-6 facility to the south consist of storage and warehousing.

Manufacturing operations on Parcel A have been inactive for approximately the last 4 years. Most of the manufacturing equipment has been removed from the C-6 facility.

3.2 Parcel A History

Aerial photos indicate that the C-6 facility was farmland prior to the 1940s. The C-6 facility was first developed by the Defense Plant Corporation (DPC) in 1941 as part of an aluminum reduction plant. The plant was operated by the Aluminum Company of America until late 1944

(CDM, 1991). In 1948, the property was acquired by the Columbia Steel Company (CSC). In March 1952, the US Navy purchased the property from CSC and established DAC as the contractor and operator of the facility for the manufacturing of aircraft and aircraft parts. DAC purchased the C-6 facility from the Navy in 1970 (CDM, 1991).

Structures on Parcel A were constructed and renovated at various times. Parts of Buildings 29, 33, 34, 36, 37, and 43 were part of the original construction of the DPC facility in 1941. Buildings 29 and 37 were renovated and enlarged to the north in the late 1960s and early 1970s. Buildings 57 and 61 were constructed in the early 1950s. Building 67 was constructed in the 1960s.

3.3 Regional Geology and Hydrogeology

Regionally, the C-6 facility is located in the Torrance Plain. Subsurface sediments in this region consists mainly of Recent alluvial deposits of gravel, sand, clay, and silt to a depth of approximately 175 feet below ground surface (bgs).

According to Department of Water Resources (DWR, 1961), the C-6 facility is located in the Torrance Plain and underlain by the Bellflower Aquitard in the upper approximately 100 feet bgs and by the Gage Aquifer, a water-bearing zone within the Lakewood Formation, from approximately 110 to 160 feet bgs. The Lakewood Formation extends to a depth of approximately 175 feet bgs. Beneath the Lakewood Formation is the San Pedro Formation, which extends to a depth of approximately 1,000 feet bgs. Water-bearing zones in the San Pedro Formation consist of the Lynwood Aquifer from approximately 300 to 390 feet bgs and the Silverado Aquifer from approximately 400 to 670 feet bgs (DWR, 1961). The Silverado Aquifer is considered a source of drinking water.

3.4 Local Geology and Hydrogeology

In the Phase I investigation, Kennedy/Jenks reviewed boring logs from demolition plans of Building 67 dated 2 February 1968 and a Phase II subsurface soils investigation performed in 1991 (CDM, 1991). The reports showed that the C-6 facility is underlain by fine-to medium-

grained sand, silty sand, and clayey sand. Borings from both investigations were advanced to a depth of approximately 30 feet below ground surface (bgs).

Subsurface soils encountered at locations drilled during this Phase II investigation, were similar in classification. Drilling to a maximum depth of 36 feet bgs penetrated an interbedded unit comprised of fine-grained sediments. The predominant soil type to this depth is silt. The silt units vary in thin intervals to clayey silt, silty clay, and sandy silt. Clay and silty sand were also found interbedded in the silt unit. Boring logs indicate that the subsurface sediments are sandier to the west (west of Building 37). Soils are generally a light brown to olive brown, with occasional gray silts noted. Though coloring was fairly consistent throughout the drilled areas, the silt varied from soft to hard.

Soils encountered were predominantly dry with occasional damp to moist intervals. No groundwater was encountered during the drilling of this field program. According to recent groundwater monitoring performed by Kennedy/Jenks for DAC (Kennedy/Jenks, 1996), local groundwater elevations range from approximately 15.5 feet to 16 feet below msl (approximately 65 feet bgs). Recent and historical data suggest that the groundwater flow direction is to the southeast.

4.0 SAMPLING AND ANALYTICAL METHODS

To accomplish the Phase II objectives and document proper protocol for the work, a summary workplan was prepared and reviewed with field staff prior to initiating field work. Following the workplan, drilling and sampling methods were conducted in accordance with Kennedy/Jenks Standard Operating Guides. The Guides incorporate industry professional standards for routine sampling, and are designed to meet general regulatory agency requirements and result in litigation quality work. A site health and safety plan was also prepared and reviewed with field staff prior to conducting field activities. Field safety meetings were conducted with Kennedy/Jenks and subcontract staff at the beginning of each day to review physical and chemical hazards, and emergency procedures related to the work.

The field work was conducted in the period from 25 March through 8 April 1996. Soil sampling locations are illustrated in Figures 3 through 7. The specific sampling techniques and sample analytical program are detailed in Table 1. Analytical work was conducted by California certified laboratories using standard EPA test methods and appropriate state-required modifications. Two mobile laboratories were employed; one for petroleum hydrocarbon analysis and one for volatile organic compound (VOC) analysis, and a stationary laboratory was contracted for metals and polychlorinated biphenyl (PCB) analysis.

4.1 Drilling and Sampling Methods

Field activities were initiated with selection of sampling locations, geophysical screening for certain underground obstructions, and coring of concrete paving to access subsurface soils. Several planned drilling locations inside Building 37 were moved due to the difficulty in penetrating the concrete bottoms of backfilled machine pits (Pits J, K, M, N, and O). At these locations, remaining open machine-pit areas were filled and previously filled areas were smoothed using a backhoe to allow access by the drill rig. Borings were then advanced adjacent to the apparent former sump locations, based on a comparison to shapes of open machine pits and visible ladder apparatus. Additional concrete coring was conducted during the drilling program at locations where drill bit penetration was refused by heavy concrete reinforcement.

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Sampling was accomplished using direct-push, hollow-stem auger, and hand-auger methods. The push technology uses a truck-mounted or portable hydraulically driven sampler or core barrel that allows penetration and standard sampling without the generation of drill cuttings. The sampler for the push tool was fitted with 1.5-inch diameter, 6-inch long brass sleeves. The method was used at locations where access allowed. No residuals were generated using this equipment. The 2-inch diameter holes were backfilled with hydrated bentonite chips. A total of 30 borings placed throughout Parcel A were sampled using this equipment (Table 1).

A mobile B-53 hollow-stem auger rig was used to drill and sample at the backfilled machine pits in Building 37. The rig was equipped with a concrete bit to drill through concrete at the bottom of each pit. Due to the heavy reinforcement of the pit bottoms however, penetration was refused and borings were advanced adjacent to the apparent sump locations outside of the pits, as previously described. Sampling was conducted using a standard split-spoon sampler fitted with 2-inch diameter, 6-inch long brass sleeves. Cuttings from these 6.75-inch diameter borings were drummed and the holes were backfilled to grade with cement-bentonite grout. A total of 11 borings were drilled and sampled with this hollow-stem auger rig, all in Building 37 (Table 1).

A limited access hollow-stem auger rig was used to drill and sample in several open machine-pits in Building 37. This small rig was lowered into each accessible pit using a forklift. Concrete bottoms of up to 5-feet thick were cored by a contractor prior to drilling at these locations. Sampling was conducted using a standard split-spoon sampler fitted with 2-inch diameter, 6-inch long brass sleeves. Cuttings from these 6-inch diameter borings were drummed and the holes were filled to grade with cement-bentonite grout. A total of 11 borings were advanced using the limited-access rig, all in Building 37 (Table 1).

Where access did not allow use of mechanical drilling equipment, test holes were advanced with a hand auger. Samples were collected with a hand-operated drive sampler fitted with one 6-inch long brass sleeve. A total of three shallow holes were sampled using this equipment in two areas of Building 67. At a fourth location in Building 67 (Sample Site 7B), the hand auger

could not be advanced due to subsurface obstructions. The hand-auger holes were backfilled with bentonite chips.

At each of the deeper test locations, the soil types encountered were logged using the Unified Soil Classification System (USCS). Boring logs are included in Appendix A.

Drummed cuttings were labeled, inventoried, and stored at the C-6 facility for later disposal by DAC.

4.2 Sample Handling

Soil samples were collected in brass sleeves that were covered with Teflon[™] sheets, capped, labeled, and bagged. For each sampling interval, three sleeves were collected for laboratory analysis, one for each of the two mobile laboratories on location and one for the offsite laboratory. Samples were identified with the boring number and depth using a predetermined nomenclature. For Building 37, where most of the drilling was conducted, an example identification code is:

3K-1-5

- 3K- for sample site 3 in machine-pit K -
- 1- at the north end of the pit
- 5 at the depth interval beginning at 5 feet bgs and extending to 6.5 feet bgs.

Samples were placed in ice-cooled insulated containers upon collection and transported to the onsite mobile laboratory at the completion of a boring or transferred to the offsite laboratory by courier at the end of each day. Sample custody was maintained by the field sampler or field supervisor until transfer to one of the laboratories. Sample custody is documented on standard chain-of-custody forms included in Appendix B.

3 Sample Analytical Program

nalytical methods were selected for potential chemicals of interests based on the PESA indings. Analytical methods selected and the number of samples analyzed for each boring a detailed in Table 1 and summarized below.

- Samples collected at locations with potential volatile organic compound (VOC) releases were analyzed in an onsite mobile laboratory by EPA Method 8010 and EPA Method 8020.
- Samples collected at locations with potential petroleum hydrocarbon releases were analyzed in an onsite mobile laboratory by EPA Method 418.1 for Total Recoverable Petroleum Hydrocarbons (TRPH).
- Samples collected at a location with potential diesel fuel releases were analyzed in an onsite mobile laboratory by modified EPA Method 8015 for Total Petroleum Hydrocarbons as diesel (TPHd).
- Samples collected at locations with potential heavy metals releases were analyzed in an offsite laboratory by EPA Method 6010 for California Code of Regulations-listed metals (CCR metals).
- Samples collected at locations with potential polychlorinated biphenyl (PCB) releases were analyzed in an offsite laboratory by EPA Method 8080 for PCBs.

Samples collected at a location with potential cyanide releases were analyzed in an offsite laboratory by EPA Method 335.3 for total cyanides.

onsite mobile laboratory operated by Transglobal Environmental Geochemistry (TEG) was ained for sample analysis by EPA Method 418.1 for TRPH. TEG also maintained a and onsite mobile laboratory for sample analysis by EPA Method 8010/8020 for VOCs and

modified EPA Method 8015 for TPHd. Separate onsite laboratories were required because of potential interferences caused by analytical reagents used for EPA Method 418.1.

All samples shipped off-site for analysis were transported to Quanterra Environmental Services in Santa Ana, California. Quanterra performed the following analyses on samples, as required:

- EPA Method 335.3 for total cyanides;
- EPA Method 6010 for CCR metals; and
- EPA Method 8080 for PCBs.

5.0 SAMPLE LOCATIONS AND INVESTIGATIVE FINDINGS

The following sections describe the 17 individual areas of environmental interest identified during the PESA, and the investigative and analytical methods performed to evaluate each area. At most sample sites, borings were advanced to 25 feet bgs, and soil samples were collected on five-foot intervals. The first two samples collected were analyzed by selected laboratory methods based on the chemicals of potential interest. Subsequent laboratory analysis was performed on the sample collected at the next lower interval if chemicals of interest were detected.

Boring locations and sample sites are indicated on Figures 3 through 7. The distribution of detected concentrations of chemicals of interest are also shown on these figures. Table 2 presents a summary of detected organic chemicals of potential interest for the investigation. The table shows all chemicals detected in one or more samples, and the results of all tested samples from each boring where any chemical detections were reported. Complete analytical data are presented in the laboratory reports in Appendix C. Table C.1 at the beginning of Appendix C provides a table of contents for laboratory reports by specific sample location and test method. Table 3 presents the range of CCR metals detected in the Parcel A investigation, published common ranges of these metals in surface soils of the Western United States, and CCR Title 22 Soluble and Total Threshold Limit Concentration values.

5.1 Sample Site Number 1 - Former Clarifiers in Building 34

During the performance of the PESA, DAC personnel stated that a concrete pad on the north side of Building 34 was the former location of clarifiers. The area was sampled to evaluate the potential for a release of hazardous materials from the clarifiers to have impacted surrounding soils.

Samples were collected on 5-foot intervals from one boring advanced to 25 feet bgs by the direct-push sampling system (Figure 5). The samples collected from 5 and 10 feet bgs were

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analyzed for VOCs by EPA Method 8010/8020, for TRPH by EPA Method 418.1, and for CCR metals by EPA Method 6010.

Laboratory results from analyzed samples collected at sample site number 1 are as follows:

- TRPH was not detected at or above the detection limit of 10 milligrams per kilogram (mg/Kg).
- VOCs were not detected at or above the detection limit of 5 micrograms per kilogram (Tg/Kg).
- CCR metal concentrations were within expected ranges and below regulatory limits.

5.2 Sample Site Number 2 - Clarifiers on the east side of Building 37

Two clarifiers were observed on the east side of Building 37 during the PESA. Sampling was conducted to evaluate the potential for a release of hazardous materials to have impacted surrounding soils.

One boring was advanced adjacent to each of the clarifiers (Figure 4) to 25 feet bgs by the direct-push sampling system. Samples were collected on 5-foot intervals. The samples collected from 5 and 10 feet bgs were analyzed for TRPH by EPA Method 418.1, for CCR netals by EPA Method 6010, and for VOCs by EPA Method 8010/8020. The samples collected from 15, 20, and 25 feet bgs at location 2A were analyzed for VOCs.

Laboratory results from seven analyzed samples collected at sample site number 2 are as allows:

TRPH was not detected at or above the detection limit of 10 mg/Kg.

- VOC analysis of the five samples from location 2A showed 1,1-Dichloroethane (1,1-DCA) in sample 2A-5 at a concentration of 7.5 μg/Kg. Trichloroethene was detected in samples 2A-10 (5.0 μg/Kg), 2A-15 (8.1 μg/Kg), and 2A-25 (5.4 μg/Kg). VOCs were not detected in the two samples from location 2B at or above the detection limit of 5 μg/Kg.
- CCR metal concentrations were within expected ranges and below regulatory limits.

5.3 Sample Site Number 3 - Machine Pits in Building 37

Fifteen machine pits in Building 37 were identified in the PESA as potential environmental interests due to large quantities of machine and hydraulic oils that were continuously stored in sumps within the pits during manufacturing operations. For the purposes of this environmental investigation, each pit was labeled with a letter and referenced by that letter during soil sampling activities. The locations of the pits and boring locations are illustrated in Figure 4.

Because the machine pits were in varying conditions and sizes, several different methods were used to sample soils from beneath each pit. Select samples from the machine pit areas were analyzed for VOCs by EPA Method 8010/8020, TRPH by EPA Method 418.1, CCR metals by EPA Method 6010, and PCBs by EPA Method 8080.

The following paragraphs detail the sampling procedures for each of the different pit conditions.

Machine Pits A, D, F, I, and L

Machine pits A, D, F, I, and L had all machinery and equipment removed from them. Pits F, I, and L measure approximately 120 feet long, 30 feet wide, and 6 feet deep. Pits A and D are approximately 40 feet long, 30 feet wide, and 6 feet deep. Sample locations were selected that would avoid embedded structures within the concrete slab (as indicated on historical

drawings provided by DAC) while attempting to stay as close to collection sumps and expansion joints as possible.

One boring was advanced in pit D. Two borings were advanced in pits A, I, and L. Three borings were drilled in pit F. A concrete contractor was retained to core the concrete floor in the bottom of each pit. Concrete floor thickness ranged from two to five feet. A hollow-stem auger rig was then lowered with a forklift into the pits to perform soil sampling. Samples were collected on 5-foot intervals to 25 feet below the bottom of the concrete slab.

One of the collection sumps in pit D was adjacent to the aisleway, allowing use of the direct-push sampling system at this location.

Laboratory results from analyzed samples collected from the first two intervals at pits A, D, F, I, and L are as follows:

- TRPH was not detected at or above the detection limit of 10 mg/Kg.
- VOCs detected in boring 3F-2 in samples collected from a drilled depth of 5.5 feet
 (11 feet bgs) included benzene (5.0 μg/Kg), ethylbenzene (58.0 μg/Kg), toluene
 (18.6 μg/Kg), and xylenes (15.0 μg/Kg). VOCs were not detected in the other
 analyzed samples above the detection limits of 5 μg/Kg.
- PCBs were not detected at or above the detection limit of 33 μg/Kg.
- CCR metal concentrations were within expected ranges and below regulatory limits.

Machine Pits B and C.

Pits B and C are each approximately 60 feet long, 20 feet wide, and 6 feet deep. Remaining equipment and machinery in pits B and C prevented sampling through the bottom of these pits. Pits B and C each had two collection sumps. Because the collection sumps for these pits were

adjacent to the west wall of Building 37, access to surrounding soils was gained by angle-boring to a depth of 36 feet bgs from the outside of the building with the direct-push sampling system. However, electrical equipment located outside of the building prevented access to the sample location for the northern sump in pit B; samples were not collected in the vicinity of this sump. Two borings were sampled at pit C and one boring was sampled at pit B.

Laboratory results from analyzed samples collected from the first two intervals at pits B and C are as follows:

- TRPH was not detected at or above the detection limit of 10 mg/Kg.
- VOCs were not detected at or above the detection limits of 5 μg/Kg.
- PCBs were not detected at or above the detection limits of 33 μg/Kg.
- CCR metal concentrations were within expected ranges and below regulatory limits.

Machine Pit E

Pit E consists of a floor trench drainage system that flows to two collection sumps. Both of the sumps contained a liquid that appeared to be hydraulic oil or cutting lubricant. Two borings were sampled on 5-foot intervals to 25 feet bgs.

Laboratory results from analyzed samples collected from the first two intervals at pit E are as follows:

- TRPH was not detected at or above the detection limit of 10 mg/Kg.
- VOCs were not detected at or above the detection limits of 5 μg/Kg.
- PCBs were not detected at or above the detection limit of 33 μg/Kg.

CCR metal concentrations were within expected ranges and below regulatory limits.

Machine Pits G and H

Machine Pits G and H were previously backfilled with soil and capped with concrete. The pits measure approximately 25 feet long and 25 feet wide. The depth of the pits is not known. One boring was advanced to 25 feet bgs with the direct-push sampling system at a location adjacent to each pit.

Laboratory results from analyzed samples collected from the first two intervals at pits G and H are as follows:

- TRPH was detected in the sample collected from boring 3G at 5 feet bgs at 5,700 mg/Kg. TRPH was not detected at or above the detection limit of 10 mg/Kg in the 10-foot sample from this boring or in the other analyzed samples.
- VOCs were not detected at or above the detection limits of 5 μg/Kg.
- PCBs were not detected at or above the detection limit of 33 μg/Kg.
- CCR metal concentrations were within expected ranges and below regulatory limits.

Machine Pits J, K, M, N, and O

Machine pits J, K, M, N, and O were previously backfilled with soil. Pits K and J were also capped with a concrete slab. Each of these pits measured approximately 120 feet long and 30 feet wide. Based on an examination of several of the collection sumps that were not

completely backfilled, the collection sumps were believed to have been approximately 10 feet deep.

Two or three borings were advanced in each pit adjacent to the collection sumps. A concrete contractor was retained to core the concrete floor adjacent to each collection sump. Soil borings were advanced with the hollow-stem auger rig. Samples were collected on 5-foot intervals from 10 to 25 feet bgs. The samples from 10- and 15-foot intervals from all borings were analyzed. Samples were also analyzed from 20 and 25 feet bgs at boring 3K-2, 30-1, and 30-2.

Laboratory results from analyzed samples collected from pits J, K, M, N, and O are as follows:

- TRPH was detected in the 10-foot samples from borings 3J-2 (23 mg/Kg), 3N-1 (157 mg/Kg), and 3N-2 (134 mg/Kg), but not in the 15-foot samples from these borings. TRPH was not detected at or above the detection limit of 10 mg/Kg in the other analyzed samples.
- VOCs were detected in several of the analyzed samples in the form of 1,1-dichloroethene (1,1-DCE) and TCE; no other VOCs were detected.
 - 1,1 DCE was detected in 3K-2-10 (8.0 μg/Kg) and 3O-1-10 (5.0 μg/Kg). The 10-, 15-, 20-, and 25-foot samples from 3O-2 contained 1,1-DCE in concentrations ranging from 20.7 μg/Kg (25 feet) to 76.6 μg/Kg (20 feet).
 - TCE was detected in the 10-, 15-, 20-, and 25-foot samples from 3K-2 in concentrations ranging from 8.4 μg/Kg (20 feet) to 97.0 μg/Kg (10 feet). The 10-, 20-, and 25-foot samples from 3O-1 contained TCE in concentrations ranging from 7.2 μg/Kg (10 feet) to 13.5 μg/Kg (20 feet). TCE was also detected in the 10-, 15-, 20-, and 25-foot samples from 3O-2 in concentrations ranging from 81 μg/Kg (15 feet) to 242 μg/Kg (20 feet).

- PCBs were detected in samples from boring 3J-2 at 10 feet bgs (9,800 μg/Kg), and 15 feet bgs (130 μg/Kg), and in boring 3O-2 at 10 feet bgs (36 μg/Kg). PCBs were not detected at or above the detection limit of 33 μg/Kg in the other analyzed samples. For sample 3M-2-10, PCBs were reported as not detected at or above the detection limit of 67 μg/Kg.
- CCR metal concentrations in the analyzed samples were within expected ranges and below regulatory limits.

5.4 Sample Site Number 4 - Machine Shop in Building 37

During the PESA, a parts degreaser and collection sump were observed in a machine shop in the eastern section of Building 37. DAC records indicated that previous chemicals used at this 'ocation included the solvent 1,1,1-trichloroethane.

One boring was advanced with the limited access rig to 25 feet bgs at a location adjacent to the solvent tank sump (Figure 4). Samples were collected on 5-foot intervals. The samples collected at 5 and 10 feet bgs were analyzed for VOCs by EPA Method 8010/8020.

Laboratory results from analyzed samples collected at sample site number 4 are as follows:

VOCs were not detected at or above the detection limits of 5 μg/Kg.

5 Sample Site Number 5 - Elevators in Building 61

wo hydraulic lift elevators in Building 61 were identified in the PESA as potential environmental interests due to associated underground hydraulic equipment.

One angle-boring was advanced beneath each lift with the direct push sample system to approximately 35 feet bgs (Figure 5). One sample was collected from each boring at a drilled depth of 35 feet. The samples were analyzed for TRPH by EPA Method 418.1.

Laboratory results from analyzed samples collected at sample site number 5 are as follows:

TRPH was not detected at or above the detection limit of 10 mg/Kg.

5.6 Sample Site Number 6 - Former Sump at Building 61

exterior northeast comer of Building 61. DAC facility records did not indicate when the sump reas removed or the condition of the sump upon removal.

metal fence presently crosses over the former location of the collection sump. One angleporing was advanced by the direct-push sampling system from outside of the fence (Figure 5). Implies were collected on 5-foot intervals to 25 feet bgs. The samples collected at 5 and 10 eet bgs were analyzed for VOCs by EPA Method 8010/8020 and CCR metals by EPA Method 10.

boratory results from analyzed samples collected at sample site number 6 are as follows:

- VOCs were not detected at or above the detection limits of 5 μg/Kg.
- CCR metal concentrations in the analyzed samples were within expected ranges and below regulatory limits.

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5.7 Sample Site Number 7 -- Sumps in Building 67

A collection sump, a secondary containment area for a metal plating process line, and a containment pit for a parts degreaser were observed in a room in the central western portion of Building 67 during the PESA. Some of the equipment, including the process tanks and degreasing tank, are still in place.

Four locations were selected and cored for subsurface sampling. The portable direct-push sampling system advanced borings to 25 feet bgs on the east side of the process tanks (boring 7C) and adjacent to the collection sump (boring 7A) (Figure 6). Boring 7D was advanced to 35 feet bgs between the process tanks and the degreaser containment pit. Hand-auger boring 7B was attempted on the west side of the process tanks, but a utility line was encountered approximately 6 inches beneath the concrete slab, and the boring was abandoned.

Samples from each of the borings were collected on 5-foot intervals. The samples collected at 5 and 10 feet bgs from borings 7A and 7C, and at 10, 15, and 20 feet bgs from boring 7D were analyzed for VOCs by EPA Method 8010/8020 and for CCR metals by EPA Method 6010.

Laboratory results from analyzed samples collected at sample site number 7 are as follows:

- 1,1-DCE was detected in sample 7C-5 at 16 μg/Kg. Sample 7D-10 contained concentrations of 1,1-DCA (8.3 μg/Kg) and 1,1,2-trichloroethane (1,1,2-TCA) (19 μg/Kg).
 1,1,2-TCA was also detected in samples 7D-15 (7.9 μg/Kg) and 7D-20 (18 μg/Kg). Sample 7D-20 also contained 1,2-DCA (8.7 μg/Kg). VOCs were not detected at or above the detection limits of 5 μg/Kg in the other analyzed samples.
- CCR metal concentrations in the analyzed samples were within expected ranges
 and below regulatory limits. Hexavalent chromium, for which published data on
 natural concentrations in soil are not available, was detected in sample 7A-10 at a
 concentration of 1.0 mg/Kg, below the regulatory criteria for hazardous waste.

5.8 Sample Site Number 8 -- Clarifier at Building 67

During the PESA, one clarifier was observed near the northwest exterior corner of Building 67.

One boring was advanced adjacent to the clarifier to 25 feet bgs with the direct-push sampling system. Samples were collected on 5-foot intervals (Figure 6). The samples collected at 5 and 10 feet bgs were analyzed for VOCs by EPA Method 8010/8020, for TRPH by EPA Method 418.1, and for CCR metals by EPA Method 6010.

Laboratory results from analyzed samples collected at sample site number 8 are as follows:

- TRPH was not detected at or above the detection limit of 10 mg/Kg.
- VOCs were not detected at or above the detection limits of 5 μg/Kg.
- CCR metal concentrations in the analyzed samples were within expected ranges and below regulatory limits.

5.9 Sample Site Number 9 - Former Containment Pit at Building 67

During the PESA, a former containment pit was observed at the south end of Building 67. All equipment had been removed from the containment pit, and the containment pit had been steam cleaned. According to DAC personnel, the pit formerly housed an electric discharge machine, which used high voltage electricity and dielectric oils to remove machine burns from aircraft parts.

One soil boring was advanced by hand-auger techniques to 10 feet below the bottom of a collection sump in the northwest corner of the pit (Figure 6). Soil samples were collected from

5 and 10 feet bgs and analyzed for TRPH by EPA Method 418.1 and for VOCs by EPA Method 8010/8020.

Laboratory results from analyzed samples collected at sample site number 9 are as follows:

- TRPH was not detected at or above the detection limit of 10 mg/Kg.
- VOCs detected in sample 9-10 included 1,1,2-TCA (6.4 μ g/Kg) and TCE (10.8 μ g/Kg). VOCs were not detected at or above the detection limits of 5 μ g/Kg in the 5-foot sample.

5.10 Sample Site Number 10 - Former Dark Room in Building 67

A former dark room was observed in the central eastern portion of Building 67 during the PESA. The dark room processed x-ray film.

Two soil borings were advanced to 5 feet bgs by hand auger techniques (Figure 6). Boring locations were selected near subsurface drainage junctions that were apparent from surface settlement. Soil samples were collected at 2 and 5 feet bgs. The samples were analyzed for CCR metals by EPA Method 6010.

Laboratory results from analyzed samples collected at sample site number 10 are as follows:

• CCR metal concentrations in the analyzed samples were within expected ranges and below regulatory limits.

5.11 Sample Site Number 11 - Floor Drains in Building 67

Dark-stained floor drains and surrounding stained floor areas were observed during the PESA in a former air compressor room in the northeast section of Building 67.

Two borings were advanced to 25 feet bgs with the direct-push sampling system at locations adjacent to the floor drains (Figure 6). Samples were collected on 5-foot intervals. The samples collected at 5 and 10 feet bgs were analyzed for TRPH by EPA Method 418.1.

Laboratory results from analyzed samples collected at sample site number 11 are as follows:

TRPH was not detected at or above the detection limit of 10 mg/Kg.

5.12 Sample Site Number 12 - Former Fuel Transfer Station at Building 44

Historical maps reviewed during the PESA indicated the presence of a former railcar fuel transfer station to the southwest of Building 44. The historical drawings also indicated the presence of underground fuel transfer lines leading from Building 44 to Building 41.

Two soil borings (12A and 12B) were advanced with the direct-push sampling system to 25 feet bgs near the approximate locations of the transfer station and the underground pipeline (Figure 4). Soil samples were collected on 5-foot intervals. The samples collected from 5, 10 and 15 feet bgs from boring 12A and all five samples from boring 12B were analyzed for TPHd by modified EPA Method 8015.

Laboratory results from analyzed samples collected from borings 12A and 12B at sample site number 12 are as follows:

 The TPHd concentration in sample 12B-15 was 200 mg/Kg. TPHd concentrations in the other analyzed samples from above and below this interval in boring 12B were below the detection limit of 10 mg/Kg. TPHd concentrations in analyzed samples from boring 12A were below the detection limit of 10 mg/Kg.

The containment area around the above ground storage tanks was identified as an area of potential environmental interest. One soil boring (12C) was advanced to 25 feet bgs at a

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location within the containment area of the southern aboveground tank. The samples collected at 5 and 10 feet bgs were analyzed for TRPH by EPA Method 418.1 and all five samples were analyzed for VOCs by EPA Method 8010/8020.

Laboratory results from analyzed samples collected from boring 12C at sample site number 12 are as follows:

- TRPH was not detected at or above the detection limit of 10 mg/Kg.
- TCE concentrations were detected in samples 12C-5 (7.8 μg/Kg), 12C-10 (16.2 μg/Kg), 12C-15 (69.2 μg/Kg), and 12C-20 (24.8 μg/Kg). TCE was not detected at or above the detection limit of 5 μg/Kg in the 25-foot sample. Other VOCs were not detected at or above the detection limits of 5 μg/Kg in the analyzed samples.

5.13 Sample Site Number 13 - Former USTs in Building 29

Historical drawings reviewed during the PESA indicated that two underground storage tanks (USTs) were formerly located in an area of Building 29 that was not developed. Sample locations were selected inside of the present structure that corresponded to the tank locations shown on the drawings.

One boring was advanced to 25 feet bgs at each former tank location with the direct-push sampling system (Figure 3). The samples collected at 5 and 10 feet bgs from boring 13A and all five interval samples from boring 13B were analyzed for TRPH by EPA Method 418.1.

Laboratory results from analyzed samples collected at sample site number 13 are as follows:

TRPH was not detected at or above the detection limit of 10 mg/Kg.

5.14 Sample Site Number 14 - Clarifier in Building 29

During the PESA, a clarifier with its covers welded shut was observed in a paint booth area in the central eastern section of Building 29.

One soil boring was advanced adjacent to the clarifier to 25 feet bgs with the direct-push sampling system (Figure 3). The samples collected at 5 and 10 feet were analyzed for VOCs by EPA Method 8010/8020, TRPH by EPA Method 418.1, and for CCR metals by EPA Method 6010.

Laboratory results from analyzed samples collected at sample site number 14 are as follows:

- TRPH was not detected at or above the detection limit of 10 mg/Kg.
- VOCs were not detected at or above the detection limits of 5 μg/Kg.
- CCR metal concentrations in the analyzed samples were within expected ranges and below regulatory limits.

5.15 Sample Site Number 15 – Former Hazardous Waste Accumulation Area at Building 29

A concrete pad to the east of the northeast corner of Building 29 was formerly used as a hazardous waste accumulation area. C-6 facility records showed that limited environmental sampling had indicated that soils beneath the concrete pad may have been impacted by TCE.

One soil boring was advanced to 25 feet bgs with the direct-push sampling system (Figure 3). Samples were collected on 5-foot intervals. The samples collected at 5 and 10 feet bgs were analyzed for TRPH by EPA Method 418.1 and for CCR metals by EPA Method 6010. All five interval samples were analyzed for VOCs by EPA Method 8010/8020.

Laboratory results from analyzed samples collected at sample site number 15 are as follows:

- TRPH was not detected at or above the detection limit of 10 mg/Kg.
- VOCs detected in 5-, 10-, 20-, and 25-foot samples include 1,1-DCA, 1,1-DCE, PCE, 1,1,1-TCA, 1,1,2-TCA and TCE. VOCs were not detected at or above the detection limits of 5 μg/Kg in 15-15. The detected concentrations of these compounds ranged from 5.4 μg/Kg to 202 μg/Kg. The highest concentrations of 1,1-DCA (60 μg/Kg), 1,1-DCE (18.6 μg/Kg), PCE (202 μg/Kg), 1,1,1-TCA (13.5 μg/Kg), and TCE (200 μg/Kg) were found in the bottom sample from the boring (25-foot interval).
 - 1,1-DCA concentrations reported in four samples ranged from 18.4 μ g/Kg (15-20) to 60 μ g/Kg (15-25).
 - 1,1-DCE was detected in 15-25 at 18.6 µg/Kg.

PCE was detected in four samples in concentrations ranging from 56.8 μ g/Kg (15-10) to 202.0 μ g/Kg (15-25).

- 1,1,1-TCA was detected in 15-10 at 7.4 μ g/Kg, and 15-25 at 13.5 μ g/Kg.
- 1,1,2-TCA concentrations reported in four samples ranged from 5.4 μ g/Kg (15-5) to 24.5 μ g/Kg (15-10).

TCE concentrations reported in four samples ranged from 17.8 μ g/Kg (15-10) to 200.0 μ g/Kg (15-25).

 CCR metals concentrations in the analyzed samples were within expected ranges and below regulatory limits.

5.16 Sample Site Number 16 - Former Cyanide Solution Storage Area in Building 33

Historical drawings reviewed during the PESA indicated that Building 33 was a former cyanide solution storage building.

One boring was advanced to 25 feet bgs with the direct-push sampling system inside of the building (Figure 5). The samples collected at 5 and 10 feet were analyzed for total cyanides by EPA Method 335.3, and for VOCs by EPA Method 8010/8020.

Laboratory results from analyzed samples collected at sample site number 16 are as follows:

- Total cyanides in the analyzed samples were below the detection limit of 0.5 mg/Kg.
- VOCs were not detected at or above the detection limit of 5 μg/Kg.

5.17 Sample Site Number 17 - Clarifier at Building 36

One clarifier was observed during the PESA on the north exterior of Building 36.

One boring was advanced adjacent to the clarifier to 25 feet bgs with the direct-push sampling system (Figure 4). The samples collected at 5, 10, 15, 20, and 25 feet bgs were analyzed for VOCs by EPA Method 8010/8020, and for TRPH by EPA Method 418.1. Samples collected at 5 and 10 feet bgs were also analyzed for CCR Metals by EPA Method 6010.

Laboratory results from analyzed samples collected at site number 17 are as follows:

- Sample 17-10 contained concentrations of TRPH at 179 mg/Kg. TRPH was not detected at or above the detection limits of 10 mg/Kg in the other analyzed samples from 5, 15, 20 and 25 feet bgs.
- VOCs detected in sample 17-10 included 1,1-DCE (30 μg/Kg) and TCE (95 μg/Kg).
 TCE was also detected in samples 17-15 (7.1 μg/Kg), 17-20 (10.3 μg/Kg), and 17-25 (272 μg/Kg). Sample 17-25 also contained 1,1-DCE (162 μg/Kg) and cis-1,2-DCE (19.2 μg/Kg). Other VOCs were not detected at or above the detection limits of 5 μg/Kg in the analyzed samples. No VOCs were detected in the sample from 5 feet bgs.
- CCR metal concentrations in the analyzed samples from 5- and 10-foot intervals were within expected ranges and below regulatory limits.

6.0 CONCLUSIONS

Seventeen sampling locations in areas of environmental interest in and around eight buildings in Parcel A of the DAC C-6 Facility were investigated. The results of the Phase II Investigation identified only a limited number of areas of continued environmental interest.

TRPH was detected at a maximum concentration of 5,700 mg/Kg at 5 feet bgs at machine pit G in the north end of Building 37 (sample site 3G). TRPH was neither detected in the sample analyzed from 10 feet bgs at this location, nor detected in the closest samples to the south from machine pit H. These data suggest a small area of limited lateral and vertical extent of TRPH impacted soils that the contractor should be aware of during demolition.

TPHd was detected at a maximum concentration of 200 mg/Kg at 15 feet bgs north of Building 44 near the location of the former fuel transfer line (sample site 12-B). TPHd was not detected in the samples from 5, 10, 20, and 25 feet bgs in this location, suggesting a limited vertical extent of impacted soils.

VOCs were detected at the former waste accumulation area north of Building 29 (sample site 15) to a total depth of 25 feet bgs. The maximum concentration of individual VOCs was 60.0 μ g/Kg 1,1-DCA (25 feet bgs), 202.0 μ g/Kg PCE (25 feet bgs), 18.6 μ g/Kg 1,1-DCE (25 feet bgs), 13.5 μ g/Kg 1,1-TCA (25 feet bgs), 24.5 μ g/Kg 1,1,2-TCA (10 feet bgs) and 200.0 μ g/Kg TCE (25 feet bgs). This area should be monitored during demolition activities and possibly investigated further to determine the vertical extent of the detected VOCs.

VOCs were detected at the clarifier adjacent to Building 36 at 25 feet bgs (sample site 17). The maximum concentration of individual VOCs, primarily found at 25 feet bgs, was 1,1-DCE (162 μ g/Kg), cis-1,2-DCE (19.2 μ g/Kg) and TCE (272 mg/Kg). Of these compounds, only TCE had detections at shallower sampling levels. 1,2-DCA was found in the 10 foot sample at 30 μ g/Kg. This area is immediately north of an area of previously detected VOCs and may reflect the northwestern extent of the area which originates outside of Parcel A.

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954019.01

VOCs were detected beneath the southernmost machine pits (pits O and K) in Building 37 (sample sites 3k and 30). The maximum concentration of individual VOCs beneath pit O was 1,1-DCE (76.6 μg/Kg) at 20 feet bgs and TCE (242.0 μg/Kg) at 20 feet bgs, and beneath pit K was 1,1-DCE (8.0 μg/Kg) at 10 feet bgs and TCE (97.0 μg/Kg) at 10 feet bgs. Both pits also had detections of TCE at 25 feet bgs. These data suggest that vapors from the VOC impacted area at Building 36 may extend beneath the southern portion of Building 37. This area should be monitored during demolition activities.

At machine pit J in Building 37 (sample site 3J), PCBs were found at 10 feet bgs at a concentrations of 9,800 μ g/Kg. PCB concentrations decreased with the depth in the succeeding sample decreased to 130 μ g/Kg. The Total Threshold Limit Concentration value (CCR Title 22) defines a California hazardous waste. For PCBs in soil, the TTLC value is 10,000 μ g/Kg. These data suggest an area of limited vertical and lateral extent which should be monitored during demolition activities.

At machine pit F in Building 37 (sample site 3F), BTEX concentrations in a sample collected from 5 feet bgs ranged from 5.0 μ g/Kg to 58.6 μ g/Kg. BTEX concentrations were not detected at or above the detection limits in the 10 foot sample, suggesting that impact by BTEX does not extend to 10 feet bgs.

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7.0 REFERENCES

California Department of Water Resources, June 1961, Planned Utilization of the Groundwater Basins of the Coastal Plain of Los Angeles County, CDWR Bulletin No. 104.

Lindsay, Willard J., 1979, Chemical Equilibria in Soils: New York, John Wiley & Sons.

Shacklette, H.T., and Boerngen, J.G., 1984, U.S. Geological Survey Professional Paper 1270.

Camp Dresser & McKee Inc., 1991, Phase I Environmental Assessment of the Douglas Aircraft C-6 Facilty, Parking Lot and Tool Storage Yard, Los Angeles, California.

TABLE 1 SAMPLING AND ANALYTICAL PROGRAM^a

Douglas Aircraft Company C-6 Facility
Torrance, California
May, 1996
K/J 954019.01

Sample	Boring	Collection				Analysis			
Site	Number	Method	418.1°	8010/8020°	8015-M ^d	8010/8020	6010°	8080 ^f	335.3°
			Mobile Laboratory			Standard Laboratory			
1	1	Direct-Push	2	2			2	l l	
2	2A	Direct-Push	2	5			2		
	2B	Direct-Push	2	2			2	İ	
3	3A-1	LimAcc. Rig	2	2			2	2	
	3A-2	LimAcc. Rig	2	2			2	2	
	3B-2	Direct-Push	2	2			2	2	
	3C-1	Direct-Push	2	2			2	2	
	3C-2	Direct-Push	2	2			2	2	
	3D-1	LimAcc. Rig	2	2			2	2	
	3D-2	Direct-Push	2	2			2	2	ŀ
	3E-1	Direct-Push	2	2			2	2	
	3E-2	Direct-Push	2	2			2	2	
[3F-1	LimAcc. Rig	2	2			2	2	
	3F-2	LimAcc. Rig	2	2			2	2	
	3F-3	LimAcc. Rig	2	2			2	2	
	3G	Direct-Push	2	2			2	2	
	ЗН	Direct-Push	2	2			2	2	
	31-1	LimAcc. Rig	2			2	2	2	
Į.	31-2	LimAcc. Rig	2			2	2	2	
	3J-1	B-53 Rig	2	2			2	2	
Į	3J-2	B-53 Rig	2			2	2	2	
[3K-1	B-53 Rig	2	2		2	2	2	
	3K-2	B-53 Rig	4	4			2	2	
	3L-1	LimAcc. Rig	2			2	2	2	
	3L-2	LimAcc. Rig	2	ľ		2	2	2	
ſ	3M-1	B-53 Rig	2	2			2	2	
1	3M-2	B-53 Rig	2	2			2	2	
	3M-3	B-53 Rig	2	2		1	2	2	

Table Key

Lim.-Acc. Rig - Limited Access Rig

Table Notes:

a) Table presents the number of samples analyzed for a given method from each sampling site.
 A complete list of compounds tested and detection limits are shown in analytical results reports included in Appendix C.

Samples were collected between 25 March and 8 April 1996.

- b) Total Recoverable Petroleum Hydrocarbons (TRPH) analyzed per EPA Method 418.1
- c) Volatile Organic Compounds (VOCs) analyzed per EPA Method 8010/8020.
- d) Total Petroleum Hydrocarbons as Diesel (TPH-d) analyzed per EPA Method 8015-M.
- e) Metals analyzed per EPA Method 6010.
- f) Polychlorinated biphenyls (PCBs) analyzed per EPA Method 8080.
- g) Cyanide analyzed per EPA Method 335.5.

TABLE 1 SAMPLING AND ANALYTICAL PROGRAM^a

Douglas Aircraft Company C-6 Facility
Torrance, California
May, 1996
K/J 954019.01

Sample	Boring	Collection				Analysis			
Site	Number	Method	418.1 ^b	8010/8020°	8015-M ^d	8010/8020	6010°	8080 ^f	335.3°
			N	lobile Laborator	/		Standard	Laboratory	•
3	3N-1	B-53 Rig	2			2	2	2	
	3N-2	B-53 Rig	2	2			2	2	
	30-1	B-53 Rig	4	4			2	. 2	
	30-2	B-53 Rig	4	4			2	2	
4	4	LimAcc. Rig		2			2	2	
5	5A	Direct-Push	1					`	
	5B	Direct-Push	1						
6	6	Direct-Push		2			2	2	
7	7A	Direct-Push		2			2		
	7B	Hand Auger		0			0		
	7C	Direct-Push		2			2	-	
	7D	Direct-Push		3			3		
8	8	Direct-Push	2	2			2		
9	9	Hand Auger	2	2					
10	10A	Hand Auger					2		
	10B	Hand Auger				İ	2		
11	11A	Direct-Push	2						
	11B	Direct-Push	2		į.				
12	12A	Direct-Push			3				
1	12B	Direct-Push			5				
	12C	Direct-Push	2	5		Ī			
13	13A	Direct-Push	2						
	13B	Direct-Push	5			ļ			
14	14	Direct-Push	2	2			2		
15	15	Direct-Push	2	5		,	2	· · · · · · · · · · · · · · · · · · ·	
16	16	Direct-Push		2					2
17	17	Direct-Push	5	5			2		
Totals	56		98	95	8	14	87	62	2

Table Key

Lim.-Acc. Rig - Limited Access Rig

Table Notes:

a) Table presents the number of samples analyzed for a given method from each sampling site
 A complete list of compounds tested and detection limits are shown in analytical results reports included in Appendix C.

Samples were collected between 25 March and 8 April 1996.

- b) Total Recoverable Petroleum Hydrocarbons (TRPH) analyzed per EPA Method 418.1
- c) Volatile Organic Compounds (VOCs) analyzed per EPA Method 8010/8020.
- d) Total Petroleum Hydrocarbons as Diesel (TPH-d) analyzed per EPA Method 8015-M.
- e) Metals analyzed per EPA Method 6010
- f) Polychlorinated biphenyls (PCBs) analyzed per EPA Method 8080.
- g) Cyanide analyzed per EPA Method 335.5.

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS - DETECTED ORGANIC COMPOUNDS*

Douglas Aircraft Company C-6 Facility Torrance, California May 1996 K/J 954019.01

Boring Location	Sample I.D.	Sample Depth Ft. bgs ^b	TRPH (mg/Kg) ^c	TPHd (mg/Kg) ^d	Benzene (µg/Kg)*	Ethyl Benzene (µg/Kg)	Toluene (µg/Kg)	Xylenes (µg/Kg)	1,1-DCA (µg/Kg)	1,2-DCA (µg/Kg)	1,1-DCE (µg/Kg)	Cis- 1,2-DCE (µg/Kg)	PCE (µg/Kg)	1,1,1-TCA (µg/Kg)	1,1,2-TCA (µg/Kg)	TCE (µg/Kg)	PCB ^f Aroclor 124
Method De	etection Limit		10	10	5	6	5	5	5	5	5	5	5	5	5	5	(µg/Kg) 33
Bldg. 29	15-5	5							21.0				69.9		5.4		
ļ	15-10	10							23.7				56.8	7.4	24.5	17.8	
	15-15	15														17.0	
	15-20	20							18.4		******		101.8		14.8	23.7	
	15-25	25							60.0		18.6		202.0	13.5	11.5	200.0	
Bldg. 36	17-5	5									,,,,,,		202.0	10.0	11.5	200.0	
ļ	17-10	10	179								30					95	
1	17-10 dup	10	168													93	
L	17-15	15											***********			7.1	
- [17-20	20														10.3	
	17-25	25									162	19.2				272	
Bldg. 37	2A-5	5						i	7.5							212	
L	2A-10	10										·	····				
	2A-15	15														5.0	
	2A-20	20														8.1	
	2A-25	25				1										5,4	

Table Key:

Result did not exceed Method Detection Limit.

Not analyzed for the given parameter.

mg/Kg - milligrams per kilogram

μg/Kg - micrograms per kilogram

DCA - Dichloroethane

DCE - Dichloroethene

TCA - Trichloroethane

TCE - Trichloroethene

PCE - Tetrachloroethene

PCB - Polychlorinated biphenyls

Table Notes:

- a) Table presents data for compounds detected one or more times and includes all samples analyzed for a boring where compounds were detected.
- A complete list of compounds tested and detection limits are shown in analytical results reports included in Appendix C.

Samples were collected between 25 March and 8 April 1996.

- b) Below Ground Surface
- c) Total Recoverable Petroleum Hydrocarbons (TRPH) analyzed per EPA Test Method 418.1.
- d) Total Petroleum Hydrocarbons as Diesel (TPHd) analyzed per EPA Method 8015M.
- e) Volatile Organic Compounds (VOCs) analyzed per EPA Method 8010/8020.
- f) Polychlorinated biphenyls (PCBs) analyzed per EPA Method 8080. Only Aroclor 1248 was detected.
- g) Boring and sampling was conducted from the bottom of an open machine pit. Sample depths are adjusted 6 feet to show depth below the floor of the building, consistent with other samples.

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS - DETECTED ORGANIC COMPOUNDS*

Douglas Aircraft Company C-6 Facility Torrance, California May 1996 K/J 954019.01

Boring Location	Sample I.D.	Sample Depth Ft. bgs ^b	TRPH (mg/Kg) ^c	TPHd (mg/Kg) ^d	Benzene (µg/Kg) ^e	Ethyl Benzene (µg/Kg)	Toluene (µg/Kg)	Xylenes (µg/Kg)	1,1-DCA (µg/Kg)	1,2-DCA (µg/Kg)	1,1-DCE (µg/Kg)	Cls- 1,2-DCE (µg/Kg)	PCE (µg/Kg)	1,1,1-TCA (µg/Kg)	1,1,2-TCA (μg/Kg)	TCE (µg/Kg)	PCB ¹ Aroclor 1248
Method D	etection Limit		10	10	5	5	5	5	5	5	5	5	5	5	5	5	(µg/Kg)
Bldg. 37	3F-2-5	110			5.0	58.0	18.6	15.0					teritoria e accionario de la composición dela composición de la co				1
	3F-2-10	16 ⁹															
	3G-5	5	5,700														
	3G-10	10	·				7										
	3J-2-10	10	23														
	3J-2-15	15															9,800
	3K-2-10	10									8.0						130
	3K-2-10 dup	10									3.0					97.0	
	3K-2-15	15															
	3K-2-20	20												 		15.3	
	3K-2-25	25												 		8.4	
	3N-1-10	10	157										-			38.2	
	3N-1-10 dup	10	145														
	3N-1-15	15															
	3N-2-10	10	134			1											
	3N-2-10 dup	10	121														
	3N-2-15	15															

Table Key;

Result did not exceed Method Detection Limit.

Not analyzed for the given parameter.

mg/Kg - milligrams per kilogram

μg/Kg - micrograma per kilogram

DCA - Dichloroethane

DCE - Dichloroethene

TCA - Trichloroethane

TCE - Trichloroethene

PCE - Tetrachloroethene

PCB - Polychlorinated biphenyla

Table Notes:

- a) Table presents data for compounds detected one or more times and includes all samples analyzed for a boring where compounds were detected.
- A complete list of compounds tested and detection limits are shown in analytical results reports included in Appendix C.

Samples were collected between 25 March and 8 April 1996.

- b) Below Ground Surface
- c) Total Recoverable Petroleum Hydrocarbons (TRPH) analyzed per EPA Test Method 418.1.
- d) Total Petroleum Hydrocarbona as Diesel (TPHd) analyzed per EPA Method 8015M.
- e) Volatile Organic Compounds (VOCs) analyzed per EPA Method 8010/8020.
- f) Polychlorinated biphenyls (PCBs) analyzed per EPA Method 8080. Only Aroclor 1248 was detected.
- g) Boring and sampling was conducted from the bottom of an open machine pit. Sample depths are adjusted 6 feet to show depth below the floor of the building, consistent with other samples.

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS - DETECTED ORGANIC COMPOUNDS*

Douglas Aircraft Company C-6 Facility Torrance, California May 1996 K/J 954019.01

Boring Location	Sample I.D.	Sample Depth Ft. bgs ^b		TPHd (mg/Kg) ^d	Benzene (µg/Kg)°	Ethyl Benzene (µg/Kg)	Toluene (µg/Kg)	Xylenes (µg/Kg)	1,1-DCA (µg/Kg)	1,2-DCA (µg/Kg)	1,1-DCE (µg/Kg)	Cis- 1,2-DCE (µg/Kg)	PCE (µg/Kg)	1,1,1-TCA (µg/Kg)	1,1,2-TCA (µg/Kg)	TCE (µg/Kg)	PCB ^f Aroclor 1248 (µg/Kg)
	etection Limit		10	10	5	5	5	5	5	5	5	5	5	5	5	5	33
Bidg. 37	30-1-10	10									5.0					7.2	
	30-1-15	15															
	30-1-20	20														13.5	
	30-1-25	25														10.0	
	30-2-10	10									51.0					121.0	36
	30-2-15	15									34.6					81.0	
	30-2-20	20									76.6					242.0	
	30-2-25	25									20.7					98.7	
Bldg. 43	12-B-5	5														80.1	
	12-B-10	10															
	12-B-15	15		200													
	12-B-20	20															
	12-B-25	25															
	12-C-5	5	40									***************************************				7.0	
	12-C-10	10	40													7.8	
	12-C-10 dup	10	40													16.2	
	12-C-15	15														00.0	
	12-C-20	20														69.2	
	12-C-25	25														24.8	

Table Key:

Result did not exceed Method Detection Limit.

Not analyzed for the given parameter.

mg/Kg - milligrams per kilogram

µg/Kg - micrograms per kilogram

DCA - Dichloroethane

DCE - Dichloroethene

TCA - Trichloroethane

TCE - Trichloroethene

PCE - Tetrachloroethene

PCB - Polychlorinated biphenyla

Table Notes:

- a) Table presents data for compounds detected one or more times and includes all samples analyzed for a boring where compounds were detected.
- A complete list of compounds tested and detection limits are shown in analytical results reports included in Appendix C.

Samples were collected between 25 March and 8 April 1996.

- b) Below Ground Surface
- c) Total Recoverable Petroleum Hydrocarbons (TRPH) analyzed per EPA Test Method 418.1.
- d) Total Petroleum Hydrocarbons as Diesel (TPHd) analyzed per EPA Method 8015M.
- e) Volatile Organic Compounds (VOCs) analyzed per EPA Method 8010/8020.
- f) Polychlorinated biphenyls (PCBs) analyzed per EPA Method 8080. Only Aroclor 1248 was detected.
- g) Boring and sampling was conducted from the bottom of an open machine pit. Sample depths are adjusted 6 feet to show depth below the floor of the building, consistent with other samples.

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS - DETECTED ORGANIC COMPOUNDS **TABLE 2** **TABLE 2

Douglas Aircraft Company C-6 Facility Torrance, California May 1996 K/J 954019.01

Boring Location	Sample I.D.	Sample Depth Ft. bgs ^b	TRPH (mg/Kg) ^c	TPHd (mg/Kg) ^d	Benzene (µg/Kg)*	Ethyl Benzene (µg/Kg)	Toluene (µg/Kg)	Xylenes (µg/Kg)	1,1-DCA (µg/Kg)	1,2-DCA (µg/Kg)	1,1-DCE (µg/Kg)	Cis- 1,2-DCE (µg/Kg)	PCE (µg/Kg)	1,1,1-TCA (µg/Kg)	1,1,2-TCA (µg/Kg)	TCE (µg/Kg)	PCB ^r Aroclor 1248
Method De	etection Limit		10	10	5	5	5	5	5	5	5	5	5	5		6	
Bldg. 67	7C-5	5								State of the latest control of the latest co	16	×					33
	7C-10	10									- 10						
	7D-10	10							8.3								
- 1	7D-15	15							0.3						19		
Ì	7D-20	20													7.9		
	9-5									8.7					18		
ł		5															
Anna de la companya del companya de la companya del companya de la	9-10	10													6.4	10.8	

Table Key:

Result did not exceed Method Detection Limit.

Not enalyzed for the given parameter.

mg/Kg - mililgrams per kilogram µg/Kg - micrograms per kilogram

DCA - Dichloroethane

DCE - Dichloroethene

TCA - Trichloroethane

TCE - Trichloroethene

PCE - Tetrachtoroethene

PCB - Polychiorinated biphenyls

Table Notes:

- a) Table presents data for compounds detected one or more times and includes all samples analyzed for a boring where compounds were detected.
- A complete list of compounds tested and detection limits are shown in analytical results reports included in Appendix C.

Samples were collected between 26 March and 8 April 1996.

- b) Below Ground Surface
- c) Total Recoverable Petroleum Hydrocarbons (TRPH) analyzed per EPA Test Method 418.1.
- d) Total Petroleum Hydrocarbons as Diesel (TPHd) analyzed per EPA Method 8015M.
- e) Volatile Organic Compounds (VOCs) analyzed per EPA Method 8010/8020.
- f) Polychlorinated biphenyla (PCBs) analyzed per EPA Method 8080. Only Aroclor 1248 was detected.
- g) Boring and sampling was conducted from the bottom of an open machine pit. Sample depths are adjusted 6 feet to show depth below the floor of the building, consistent with other samples.

TABLE 3 COMPARISON OF SITE SOIL INORGANIC CHEMICAL CONCENTRATIONS WITH COMMON SOIL CONCENTRATIONS AND STATE THRESHOLD LIMIT VALUES

Douglas Aircraft Company C-6 Facility
Torrance, California
May 1996
K/J 954019.01

TESTED	CONCENTRATION	COMMON RANGE	CCR	CCR
INORGANIC	RANGE	IN SOIL(a)	TTLC(b) Value	STLC(c) Value
CHEMICAL	(mg/Kg)	(ppm)	(mg/Kg)	(mg/L)
ANTIMONY	<1.0	<1 - 2.6 ^d	500	15
ARSENIC	<10 - 17.5	1 - 50	500	5
BARIUM	49.2 - 290	100 - 3,000	10,000	100
BERYLLIUM	<0.50 - 1.2	0.1 - 40	75	0 .75
CADMIUM	<0.20 - 2.5	0.01 - 0.7	100	1.0
TOTAL CHROMIUM	18.0 - 40.7	1 - 1,000	2,500	560
HEXAVALENT CHROMIUM	<0.10 - 1.1	Not available	500	5
COBALT	5.5 - 48.1	1 - 40	8,000	80
COPPER	14.0 - 171	2 - 100	2,500	25
LEAD	3.9 - 19.8	2 - 200	1,000	5
MERCURY	<0.040 - 0.094	<0.01 - 4.6 ^d	20	0 .2
MOLYBDENUM	<4.0	<3 - 7 ^d	3,500	350
NICKEL	11.4 - 70.1	5 - 500	2,000	20
SELENIUM	<0.50 - 0.90	0.1 - 2	100	1
SILVER	<0.50 - 3.4	0.01 - 5	500	5
THALLIUM	<200	2.4 - 31 ^d	700	7
VANADIUM	24.7 - 75.5	20 - 500	2,400	24
ZINC	45.8 - 184	10 - 300	5,000	250

mg/Kg - milligrams per Kilogram

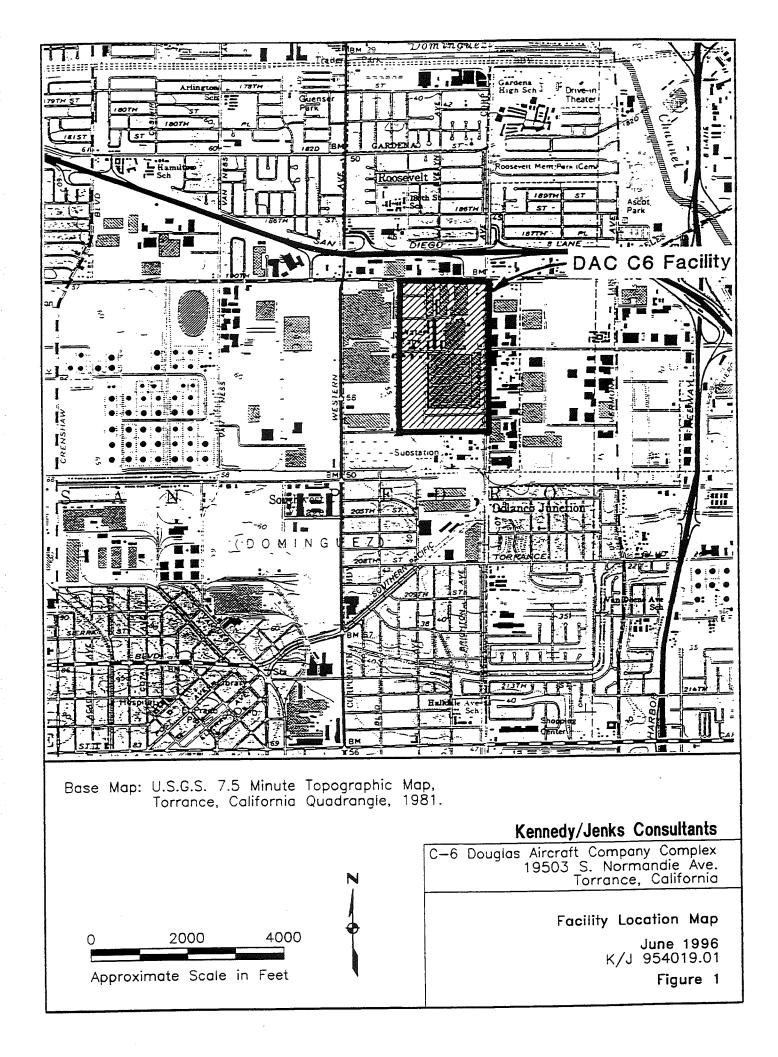
mg/L - milligrams per Liter

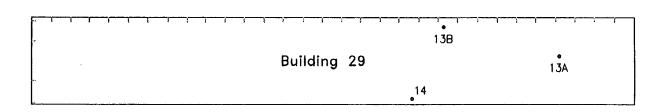
ppm - parts per million

- a) Chemical Equilibria in Soils. Willard L. Lindsay, John L. Wiley & Sons, NY 1979.
- b) CCR, Title 22, Total Threshold Limit Concentration (TTLC) value.

Value set to define a California hazardous waste based on the total concentration.

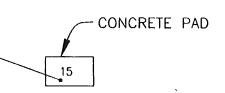
- c) California Code of Regulations, (CCR), Title 22, Soluble Threshold Limit Concentration (STLC) value.
- Value set to define a California hazardous waste based on leachate concentration.
- d) Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States.
- H.T. Shacklette and J. G. Boerngen, USGS Professional Paper 1270, U.S. Government Printing Office, Washington, 1984.





Sample Site 15

Depth	TRPH		Volat	ila Organic	Compounds	(ug/Kg)	
(ft)	(mg/Kg)	1,1-DCA	1,1-DCE	PCE	1,1,1-TCA	1,1,2-TCA	TCE
5	< 10	21.0	< 5	69.9	< 5	5.4	21.2
10	< 10	23.7	< 5	56.8	7.4	24.5	17.8
15	NA.	< 5	< 5	< 5	< 5	< 5	< 5
20	NA	18.4	< 5	101.8	< 5	14.8	23.7
25	NA	60.0	18.6	202.0	13.5	11.5	200.0



Legend:

Phase II approximate boring locations.

TRPH Total Recoverable Petroleum Hydrocarbons

1,1-DCA 1,1- Dichloroethane
1,1-DCE 1,1- Dichloroethane
1,1,1-TCA 1,1,1- Trichloroethane

1,1,1—ICA 1,1,1— Trichloroethane 1,1,2—TCA 1,1,2— Trichloroethane

PCE Perchloroethene
TCE Trichloroethene

<10 Result fell below the given method detection limit

NA Not Analyzed

mg/Kg milligrams per Kilogram ug/Kg micrograms per Kilogram

0 50 100 200 Approximate Scale 1" = 100'

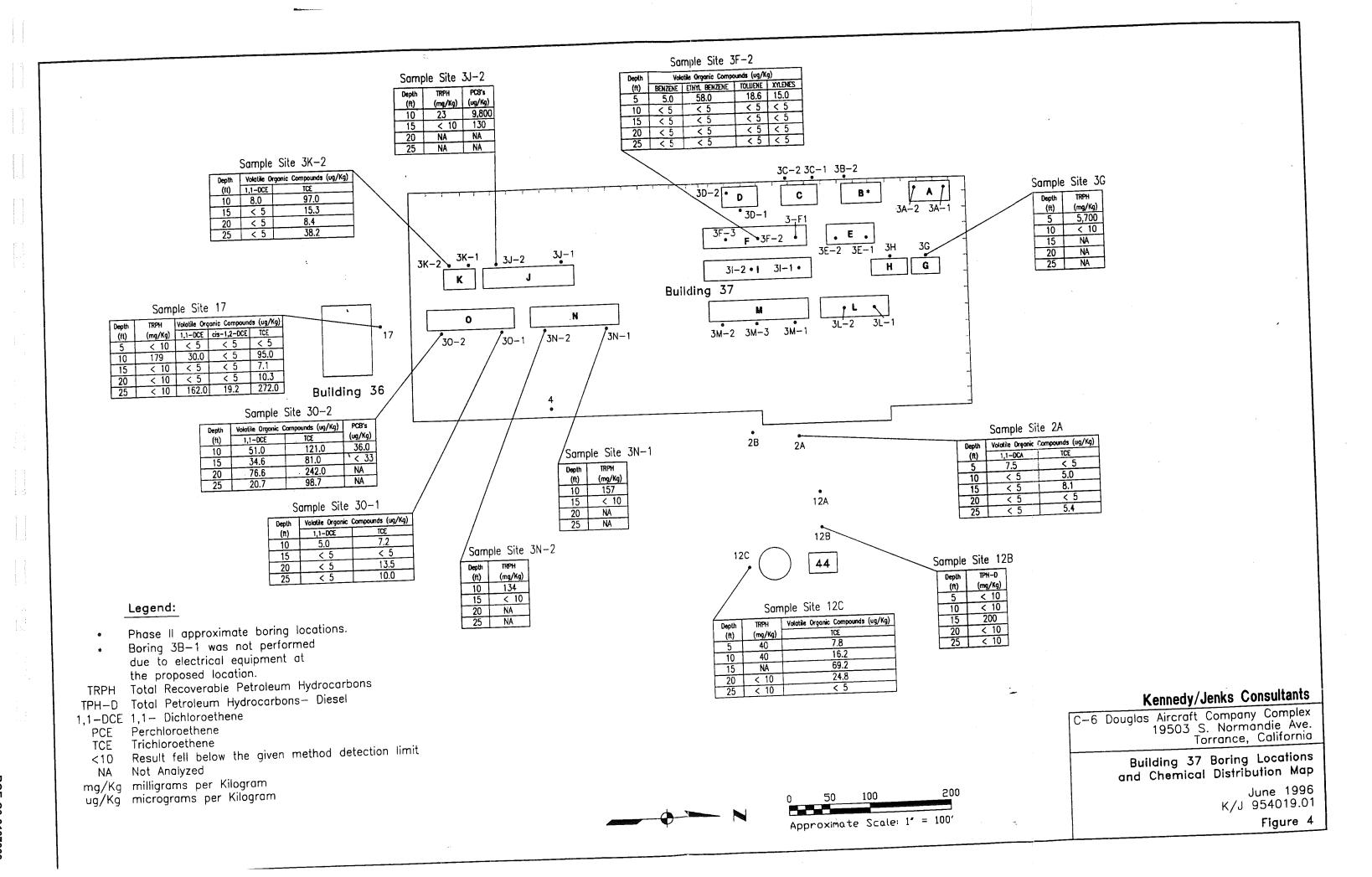
Kennedy/Jenks Consultants

C-6 Douglas Aircraft Company Complex 19503 S. Normandie Ave. Torrance, California

Building 29 Boring Locations and Chemical Distribution Map

June 1996 K/J 954019.01

Figure 3



BOE-C6-010/360

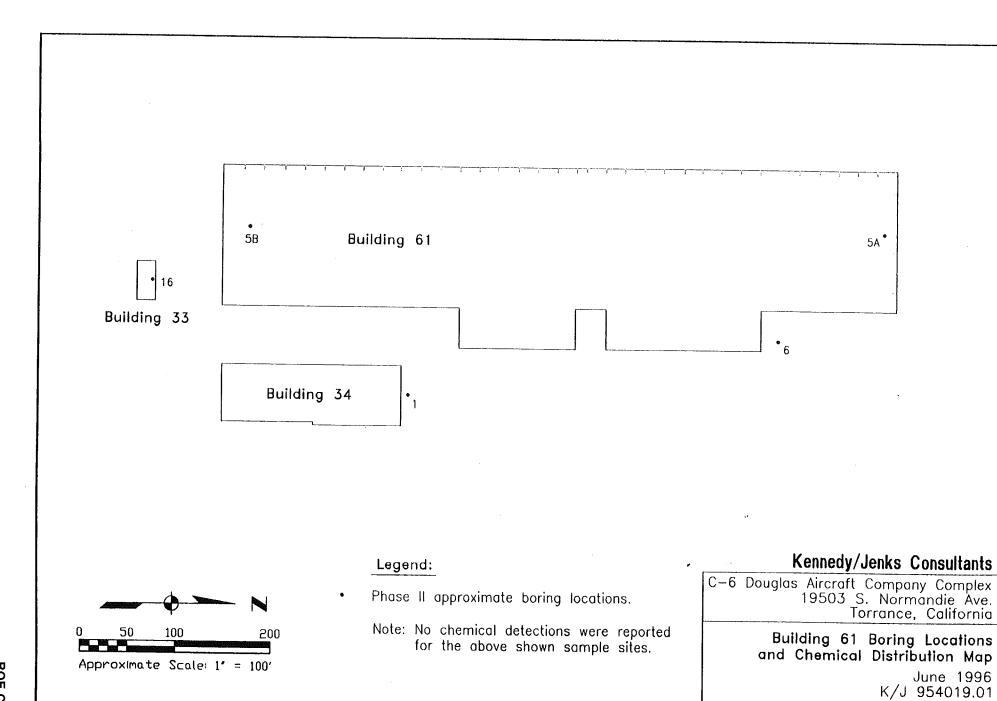
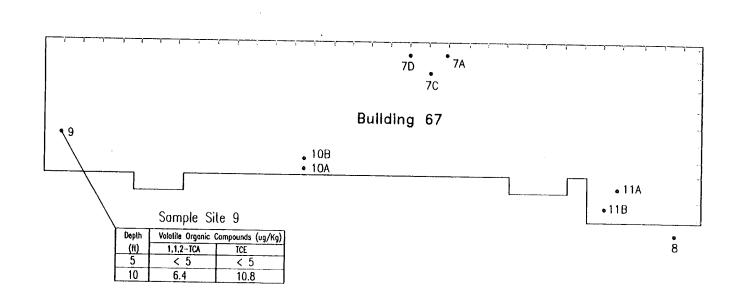


Figure 5



Legend:

Phase II approximate boring locations.

1,1,2-TCA 1,1,2- Trichloroethane

TCE Trichloroethene

BOE-C6-0107362

< 5 Result fell below the given method detection limit micrograms per Kilogram

มg/Kg

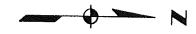
Kennedy/Jenks Consultants

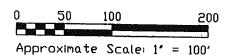
C-6 Douglas Aircraft Company Complex 19503 S. Normandie Ave. Torrance, California

Building 67 Boring Locations and Chemical Distribution Map

> June 1996 K/J 954019.01

> > Figure 6





Appendix A

		GLOCA		_			· · · · · · · · · · · · · · · · · · ·	mones genine anni leosta que fissa de la granda in moderni granda associação amb	Ken	nedy/Jen	ks Consu	iltants
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: L		Mar	ess				DRILLE	Pete	Project Name	DAC C-	6 Parcel A	Phase II
e e		NG MET Geo	robe					IT (S) SIZE 2 in.	ŀ	954019.0		
DI	PTH	TO WAT	ER En cou i	itei	red				Project Number -		AL DEPTH	
LC	XGGE	DBY J. Kı				<u> </u>			DATE STARTED	DAT	E COMPLETED	26 ft.
E	SA	ABI EC		T					4/1/96			4/1/96
Hiven	lecovere	Collected Head Space	Dept (feet	3	Lithology	USC	S Munnell Color	SOI	L DESCRIPTION AND	DRILLING REI	MARKS	
		<u> </u>		ĥ	MANA	M		Concrete, 3 inches				
		6.8	5			ML		Clayey SILT: very dark brow	n, some very fine sand, i	moist, some orga	nic material	-, - - - - - -
		6.0	10			ML		brown, increasing sand conte	nt			-
		7.2	15-			ML		Sandy SILT; brown, very fine	sand, moist			
		7.1	20-			ML		some clay				-
		7.0	25-			ML		decreasing clay				- -
			30-					Boring Completed at 26 feet.		-		
			40-				- -					-

		III g GLOCAT		-		-		· Province of Williams and Color	stavityces		Ken	neay/J	enks Consu	ltants
		East	of Buil	di	ng 37, a	djac	ent to	darifiers			Boring Name —	_2A		Medianas.
1		NG COM Man	PANY PSS					DRIL.	P	'ete	Project Name		C-6 Parcel A	Dhasa II
DRI	LLI	NG METI Geor	IOD (S)					DRIL	L BIT	(S) SIZE		95401		I mase II
DEI	тн	TO WAT	R Encoun	tor						ML.	Project Number ELEVATION		TOTAL DEPTH	
ΙΩ	GE	DBY		uc1	- Cu						DATE STARTED			26 ft.
H	SA	J. Kn	$\overline{}$	Т					·		4/1/96			4/1/96
Driven	COVERID	Collected Spece Spece Reading	Depth (feet)		Litholo	67	USC	CS Munuell Color		son	L DESCRIPTION ANI	DRILLING	REMARKS	
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4			Mane METH	33						P	ete P	roject Name	DAC	C-6 Parcel A	Phase II
			Geopi	obe					DRII.		(S) SIZE	roject Number _	95401		
Ľ	EPT	OT H	WATER Not E	icount	ered	l						VATION		TOTAL DEPTH	
Ĺ	OGG.	ED E	3Y J. Kni								DAT	E STARTED		DATE COMPLETED	26 ft.
ŧ	SA L 70	MPL.	ES		Т			T				4/2/96			4/2/96
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Bu	ilding 37.	Pit A				Boring Name —	3A-1	
DRILLING CO	mpany egg Drilli			DRILLER	leff	1	DAC C-6 Parcel	A Dhess II
DRILLING ME	THOD (S)			DRILL BI	r (s) size	Project Name		A Filase II
DEPTH TO WA					in.	Project Number _ ELEVATION	954019.01 TOTAL DEPTH	
LOGGED BY	Encoun	tered		· · · · · · · · · · · · · · · · · · ·			ŀ	26.5 ft.
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Greg	g Drillin	ng_			DRIL	Jeff		Project Name	DAC	C-6 Parcel A Phase II
DRILLING METH SIMO	CO 5000)			DRILL	L BIT (S) SIZE 6 in.		Project Number	95401	
DEPIH TO WATE Not I	R Encount	ered					E	LEVATION		TOTAL DEPTH
OGGED BY K. Ki	night						-	OATE STARTED 3/26/96	• • • • • • • • • • • • • • • • • • • •	DATE COMPLETED
Recovered Collected Space Space Reading	Depth (feet)	Ľ	ithology	USC: Log	S Munucii Color		SOIL	DESCRIPTION AND	DRILLING	3/26/96 GREMARKS
7 0 EVX	5					Concrete, 6 inch Background OV	hes VM: 0.0 ppm			
	5-			ML		Sandy SILT: ligh	ht to medium i	brown, fine, soft, dry to	slightly mo	- -
******	1 1	 	####	1#		Bottom of Mach				
****	10-					-				
	-			ML						
	15-			ML						
	20-			ML		Clayey SILT: brow	- — — - own, slightly m	oist, firm		
	25-			SM		Silty SAND: light	t brown, fine, l	loose, dry to slightly me	- — — —	
	30-					Boring Completes	ed at 26.5 feet.			
	40-	Harri da kara								

POPING	LOCATIO	JUB		-	_		_		· · · · · · · · · · · · · · · · · · ·	alwayrpricategale	Rennedy/Jenks Consu	
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	NG COMP. Mane	SS			_					DRILLER	Project Name DAC C-6 Parcel A	Phase II
DRILLIN	G METH									DRILL BI	Project Number 954019.01	
DEPTH 7	TO WATE	2			-					<u> </u>	ELEVATION TOTAL DEPTH	
LOGGED	BY	ncount	ere	1							DATE STARTED DATE COMPLETED	34 ft.
MAZ	J. Kni		1		_				1		· 4/2/96	4/2/96
Driven	Collected literal Spare Kending	Depth (feet)		Li	thalo	•		USCS	3	(unsell Color	SOIL DESCRIPTION AND DRILLING REMARKS	
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Boring				on marketing and the party		Keni	reuy/J	enks Consultants			
BORING LOCAT Outs	de Buil	ding 37, adjaces	nt to pit C			Boring Name	3C-1				
DRILLING COMI Mane	PANY			DRILLER	'ete	Project Name		C-6 Parcel A Phase II			
DRILLING METH	IOD (S)			DRILL BIT	(S) SIZE		95401				
DEPTH TO WATE	R				in.	Project Number ELEVATION		TOTAL DEPTH			
LOGGED BY	ncount	ered				DATE STARTED		36 ft. DATE COMPLETED			
J. Kn	ight	1	I T			4/2/96		4/2/96			
Driven Recovered Collected Head Space Neading	Depth (feet)	Lithology	USCS Log	Mamaeli Color	SOI	L DESCRIPTION AND	DRILLING	REMARKS			
	5-		CL		Asphalt, 2" Bottom of Machine Pit C Silty CLAY: brown, trace of very fine sand, slightly moist						
	15-		ML ML		Sandy SILT: brown, very fine	to fine sand, slightly mo					
	25-		CL		Silty CLAY: mottled dark and	l light brown, slightly mo	oist, trace of	very fine sand			
	30-	3	ML	·	Clayey SILT: brown, trace of	very fine sand, moist					
	35-	<u> </u>	AIL		Sandy SILT: brown, very fine	sand, some clay, slightly	moist	_			
-	40-			-	Boring Completed at 36 feet			- - - -			
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DOUGHER Building T, adjacent to size C Project Name DAC C-6 Parcel A Phase Project Name DAC C-6 Parcel A Phase DALLEW Growth Date of the Section of Controls (Controls of Controls (Controls of Controls of Controls of Controls of Controls of Controls (Controls of Controls	Boring				Kennedy/Jenks Consultants
Delian D	Out	side Buil	ding 37, adjacent to pit C		Roring Name 3C-2
Geographic State Project Number 954019.01 September Septem	DRILLING COM Mar	IPANY IESS			
Solid Description And Description Solid De	DRILLING MET	HOD (S)		DRILL BIT (S) SIZE	27121221
J. Kurlett J. J. Kurlett J.	DEPTH TO WAT	ER.			
Soll Description and Drilling remarks 1	LOGGED BY		ered		DATE STARTED DATE COMPLETED
Asphalt, 2" Bottom of Machine Fit C Sandy SILT: brown, very fine to fine sand, slightly moist 6.2 15- ML Silty SAND: brown, very fine to fine, slightly moist Silty SAND: brown, very fine to fine, slightly moist 6.1 25- ML Sandy SILT: brown, very fine to fine sand, slightly moist Clayey SILT: dark brown, slightly moist, some very fine sand	SAMPLES				1
Bottom of Machine Pit C Sandy SILT: brown, very fine to fine sand, slightly moist 6.2 15 ML Silty SAND: brown, very fine to fine, slightly moist 6.1 25 ML Sandy SILT: brown, very fine to fine, slightly moist Clayey SILT: brown, very fine to fine sand, slightly moist Clayey SILT: dark brown, slightly moist, some very fine sand	Driven Recovered Collected Head Space	Depth (feet)	Liftelogy USCS Log		OIL DESCRIPTION AND DRILLING REMARKS
6.1 25 ML Sandy SILT: brown, very fine to fine sand, slightly moist 6.0 30 ML Clayey SILT: dark brown, slightly moist, some very fine sand	5.6	5-		Bottom of Machine Pit C	Tine to fine sand, slightly moist
Sandy SiLT: brown, very fine to fine sand, slightly moist 6.0 ML Clayey SiLT: dark brown, slightly moist, some very fine sand	6.3	20-1	SM	Silty SAND: brown, very fi	ine to fine, slightly moist
ML Clayey SILT: dark brown, slightly moist, some very fine sand	6.1	25-	ML	Sandy SILT: brown, very fu	ne to fine sand, slightly moist
Sandy SILT: brown, very fine to fine sand, slightly moist	6.0	30-	ML ML	Clayey SILT: dark brown, si	lightly moist, some very fine sand
	6.3	35-	ML ML	Sandy SILT: brown, very fin	te to fine sand, slightly moist
Boring Completed at 36 feet.		40-		Boring Completed at 36 fee	

Kennedy/Jenks Consultants **Boring Log** 3D-1 BORING LOCATION Boxing Name -Building 37, adjacent to pit D DAC C-6 Parcel A Phase II DRILER DRILLING COMPANY Project Name Pete Maness DRILL BIT (5) SIZE 954019.01 DRILLING METHOD (S) Project Number TOTAL DEPTH Geoprobe DEPIH TO WATER 34 fŁ Not Encountered DATE COMPLETED DATE STARTED 4/3/96 SOIL DESCRIPTION AND DRILLING REMARKS اجسور سلما Concrete, 4" Bottom of Machine Prt D Sandy SILT: brown, very fine sand, trace of clay, slightly moist 5.2 light brown 6.0 6_3 some clay, moist trace of clay 6.1 mercasing clay 6.4 35 Boring Completed at 34 feet.

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Boring Log

Kennedy/Jenks Consultants

BORIN	K L	CATION	- 247 -	34 Y)		•		Boring Name —	3D-2			
DRILL	ING	COMPAN	ny			DRULER Jef		Project Name	DAC C-	-6 Parcel A	Phase II	
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DEFI	TO	MCO WATER				6 iz		Project Number	TO	TAL DEPTH	26.5 ft.	
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P.2 **Kennedy/Jenks Consultants**

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	DEPT	H TO	WATER Vot En										ELEVATION		TOTAL DEPTH 26 ft.			
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DEALLES Project Name DAC C-6 Parcel A Phase II SCALLES Project Namber School 19 1	L		Bu	ildir	ıg 37,	adja	acen	t to	pit E				Roring Name	3E-2		- Secretaria
Concrete, 2 lie. Project Number 954019.01 Not Executered 2 lie. Project Number 954019.01 A Study	D	RILL	ING CO	MPA.	NY								1		C (D	אר אומו א
Secondaries Secondaries	D	RILL	ING M	THO	D(S)						DRILL E					A Phase II
Not Exceed to July 1 and	D	EPTI	TO W	TER								2 in.	Project Number	95401		
Aproximate Bottom of Machine PM E Sandy SILT. dark brown, very fine to fine sand, dry Sight brown, very fine to fine sand, dry Sight brown to gray, trace of clay, dry Boring Completed at 26 feet.	L	OGG		t En	count	ered	<u> </u>									26 ft.
SOIL DESCRIPTION AND DRILLING REMARKS Concrete, 4* Aproximate Bottom of Machine Pit E Sandy Sill: dark brown, very fine and, slightly moist, some clay 5.4 10 ML light brown, dry 5.1 20 ML light brown, very fine to fine sand, dry 5.1 25 ML light brown to gray, trace of clay, dry Boring Completed at 26 feet.		SA	MPLES		ht	,						,			DATE COMPLETED	4/3/96
Concrete, 4* Aproximate Bottom of Machine Pit E Sandy Sill.: dark brown, very fine and, slightly moist, some clay 5.4 10 ML light brown, dry 5.1 20 ML light brown, very fine to fine sand, dry 5.1 25 ML light brown to gray, trace of clay, dry Boring Completed at 26 feet.	Delices	Recovered	Collected	Reading (mg/L)	Depth (feet)		Lithoi	iogy	US	CS #	Manuell Color	SO	L DESCRIPTION AN	D DRILLING	REMARKS	
Sandy SILT: dark brown, very fine sand, slightly moist, some clay Sandy SILT: dark brown, very fine sand, slightly moist, some clay Sandy SILT: dark brown, dry						m	M	M	M			Concrete, 4"			 	
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Sandy SiLT: dark brown, very fine sand, slightly moist, some clay 5.4 10 ML light brown, dry 5.5 15 ML light brown, dry 5.1 20 ML light brown, very fine to fine sand, dry light brown to gray, trace of clay, dry Boring Completed at 26 feet.			₩ 4	.7	5-			111				i				
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			ding 3	7. Pit	<u>F</u>				Boring Name	3F-1					
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L		ING MET	CO 50				DRILL	BIT (S) SIZE 6 in.	Project Number _	954019.01					
r	EPTH	TO WAT		nterec	i				ELEVATION	TOTAL DEPTH					
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	Recover	Collected Head Space Rendine	(fee	2)	Lithology	USC	S Munneil Color	SO	IL DESCRIPTION AND	DRILLING REMARKS					
								Concrete, 6 inches - Background OVM: 0.0 ppm							
		×		5-		ML		Sandy SILT: brown, fine, so	Sandy SILT: brown, fine, soft, slighly moist						
-					3939			Bottom of Machine Pit F	Bottom of Machine Pit F						
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		G LOCAT Buil	ding 37.	Pit F				Boring Name	3F-3	180000		
I	RILLI	NG COM	PANY			DRILLER	Jeff	Project Name	DAC C-6 Parce	I A Phose II		
	RILLI	NG MET	z Drilli HOD (S) CO 500			DRILL BI	r (s) size	1		1 A Fliase II		
Ī	EPTH	TO WAT	ER Encoun			6	in.	Project Number _ ELEVATION	954019.01 TOTAL DEPTH			
ī	OGGE	DBY		tered			<u> </u>	DATE STARTED	DATE COMPLETE	26.5 ft.		
E	_ SA}	(PLES	night		T	T		3/26/96	DATE COMPLETE	3/26/96		
1	Recovered	Collected Space Space Reading	Depth (feet)	Lithology	USCS Log	Manueli Color	so	IL DESCRIPTION AND	DRILLING REMARKS			
		SWXX	10-		ML ML		Background OVM: 0.0 ppm Sandy SILT: light to medium brown, fine, firm, slightly moist Bottom of Machine Pit F dry and loose Silty CLAY: brown, firm, slightly moist					
			25-		ML		Sandy SILT: light to medium	brown, fine, firm, slightly	moist			
			30-				Boring Completed at 26.5 fee	et.				
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		LOCATI Build	ing 37,	adjac	cent t	o pi	t G		Boring Name 3G					
DR	ши	IG COMP						DRILLE	Project Name DAC C-6 Parcel A Phase II					
DR	ILLIN	G METH						DRILL B	BIT (2) SIZE					
DE	РТН Т	O WATE		7				i	2 in. Project Number 954019.01 ELEVATION TOTAL DEPTH					
10	GGEI	BY		erea					DATE STARTED DATE COMPLETED					
	SA _M	J. Kni						T	4/3/96 4/3/96					
Driven	Recovered	Collected Space Reading	Depth (feet)	1	Litholog	,	USCS Log	Manuell Color	SOIL DESCRIPTION AND DRILLING REMARKS					
	4.2 5- ML 10- ML 20- ML								Concrete, 4" Approximate Bottom of Machine Pit G Clayey SILT: mottled brown and dark brown, moist, low plasticity Sandy SILT: brown, very fine to fine sand, slightly moist some clay, dry					
		5.0	25-				ML		trace of clay, dry Boring Completed at 26 feet.					

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		Buil	ding :	37,	adjacent to	pit H			Boring Name	3H
P	KILL	ING COM Mar ING MET	PANY CSS				DRILLE	Pete	Project Name	DAC C-6 Parcel A Phase II
¥.		Geo	orobe	S) :		_ 	DRILL B	IT (S) SIZE 2 in.	1	954019.01
D	EPTH	TO WAT Not	ER		ered				Project Number -	TOTAL DEPTH
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E	SA	MPLES	\neg						4/3/96	4/3/96
546	beovere	Collected Head Space	E G	epth ext)	Lithology	USC	S Manuell Coker	SC	IL DESCRIPTION AND	DRILLING REMARKS
	-	OLENG	-		mmn	(4		Concrete, 4"		
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		S 5.7	.			<u></u>		Approximate Bottom of Pit	H	
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1	Build	ine 37.	Pit I						Boring Name —	3I-1				
DRILL	ING COM	PANY					DRILLER		_		7 ( D1	A DL TT		
DRILL	Greg ING METI	g Drilli	ng				DRILL BIT	eff (S) SIZE	Project Name			A Phase II		
Ĭ	SIMO	CO 500	0					in.	Project Number _	954019	.01			
DEPTH	TO WATE	R Incoun	tomai						ELEVATION	T	OTAL DEPTH			
LOGGE	EDBY		cereu						DATE STARTED	r	ATE COMPLETED	26.5 ft.		
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		Depth (feet)	Ι.			USCS	Munnell		T DECORPORATE TO THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF T	DDW				
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	BOTING LOG Kennedy/Jenks Consultants  BOTING LOG											
В	uildin	g 37.	Pit I				Boring Name 3I-2					
DRILLING C	regg ]	Drillin	ng		DRILLER	Jeff	Project Name		Parcel A Phase II			
DRILLING M	IMCC	D(S)			DRILL BI	T (S) SIZE 6 in.	ĺ .	954019.0				
DEPTH TO V	vater ot En					о нь	Project Number _ ELEVATION		L DEPTH			
LOGGED BY	?		cicu				DATE STARTED	DATE	26.5 ft.			
SAMPLES	. Knig		1	7			3/25/96		3/25/96			
Driven Recovered Collected Head	Space Reading (mg/L)	Depth (feet)	Lithology	USCS Log	Marmeil Color	1	SOIL DESCRIPTION AND DRILLING REMARKS					
		-				Concrete, 6 inches Background OVM: 0.0 ppm						
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		5		SM		Silty SAND: light brown, fir	ne. dry to slightly moist	morty oraded	-			
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		10		ML		Sandy SILT: brown, with mica, soft, slightly moist						
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	BORING LOCATION Reinfed y/Jenks Consultants												
Building 37, Pit J Boring Name 3J-1													
DRI	LLIN	G COMP/ Gregg		ng			Jef <b>T</b>	Project Name	DAC C-6 Parcel A Phase II				
DRI	LLIN	G METHO HSA N	DD(S)			DRILL BI	T (S) SIZE S in.	Project Number _	954019.01				
DEP	тнт	O WATER					, u.	ELEVATION _	TOTAL DEPTH				
100	GED	Not E		ered		·····		DATE STARTED	26.5 ft.				
	SAMI	S. Bar	lling	1	7			3/26/96	3/26/96				
Driven	pcovered	Head Space Reading	Depth (fest)	Lithology	USCS Log	<del>Manuell</del> Color	SOI	L DESCRIPTION AND	DRILLING REMARKS				
	æ (	<u> </u>	<del>                                     </del>	×××××			Concrete						
			-				brown clay, fill PID: 4.5 ppm at hole, 4.6 pp	m in building	-				
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- 4	BOTING LOG Kennedy/Jenks Consultants BORING LOCATION																
			Build СОМ		7. F	ΉJ					DRILLE		Boring Name 3J-2				
1			Greg	<u>Dri</u>	lin	<u> </u>						Jeff	Project Name	DAC	C-6 Parcel A Phase II		
8			METH HSA	Mobi	le I	<u>3-53</u>					DRILL	BIT (S) SIZE 6 in.	Project Number _	95401			
	DEPTI		WATE Not E		nte	red							ELEVATION		TOTAL DEPTH		
Î	LOGGED BY S. Bartling												DATE STARTED		26.5 ft. DATE COMPLETED		
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	Recovere	Collected	Hoad Spece Reading	Dep (fee	3	;	Litholo	***		USCS Log	Mumel Colar		L DESCRIPTION AND	DRILLING	G REMARKS		
				25						ML ML	2.5Y5/4 2.5Y5/6 2.5Y5/6 - 4/4 2.5Y5/4	Clayey SILT: light brown to completed at 26.5 feet	n, firm, dry, hard and da	rker in spot	s		
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	BOTING LOG Rennedy/Jenks Consultants  BORING LOCATION													
1	Building 37, Pit K													
Ī	RILI	JNC	G COMPA	ANY			DRILLE	t j						
Ī	RILI	INC	Gregg METH	Drillin	15		репте	Jeff IT (S) SIZE	Project Name	DAC C-6 Parcel A Phase	Ш.			
			HSA N	Mobile	B-53			6 in. Project Number 954019.01						
1	EPII			t rcount	ered			EI	LEVATION	TOTAL DEPTH				
I	OGG	ED I	BY					D	ATE STARTED	26.5 ft.  DATE COMPLETED				
E	S/	MM	S. Ban				T		3/25/96	3/25/96				
	E   29	18	Hoad Space Reading	Depth (feet)	Lithology	USCS Log	Marmell Color	SOIL	DESCRIPTION AND	DRILLING REMARKS				
1	2	3	Span B							Did Did Divini				
				1 _		S CL	10YR3/3	Concrete, 6-8 inches dark brown clay, soft						
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						1	2.5Y5/4	Silty CLAY: light olive brown,	gritty, soft to firm, non	nplastic, dry, mottled yellow	-1			
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	▩			15		ML	2.5Y6/4	Clayey SILT: light yellow brow	n. soft. drv		-4			
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	BOTING LOCATION Kennedy/Jenks Consultants												
L		Build	ing 37,	Pit K				Boring Name 3K-2					
DR	ULLD	IG COMP	ANY Drilli			DRILLER		Project Name DAC C-6 Parcel A Phase					
DR	ULLIN	IG METH	OD (S)			DRILL B	Jeff IT (S) SIZE	_			<u>C11</u>		
DE	PTH 1	O WATE					6 in.	Project Number _	954019.01	DEPTH			
10	GGEI		ncount	ered				DATE STARTED		26.5 ft.			
		S. Bar	tling	<del></del>				3/26/96	DATE	OMPLETED 3/26/96			
Driven	beovered	Collected Spince Reading	Depth (feet)	Lithology	USCS Log	Marmell Color	soi	SOIL DESCRIPTION AND DRILLING REMARKS					
		1204					Concrete, 6-8 inches light brown clay fill			<del></del>			
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					CL	2.5Y4/6	Silty CLAY: olive brown, fire	n to hard, dry, nonplastic	;		-1		
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			15		ML	2.5Y5/4	Clayey SILT: light olive brow	n, soft, friable, dry, with	light tan, hard inc	ı, hard inclusions (5%)			
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			20				F				1		
			20		CL	2.5Y4/4	Silty CLAY: olive brown, soft	to firm, dry, nonplastic			1		
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			_		ML	2.5Y4/4	Clayey SILT: olive brown, soi	t, triable, dry					
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			+				Boring Completed at 26.5 fe	e Ł					
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		Buildi	ng 37,	Pit	L							Boring Name —	3L-1				
DRI	LLIN	G COMP. Gregg		ng						DRILLE	R Jeff	Project Name	DAC C-6 Parcel A Phase II				
DRI	LLIN	G METH SIMC	(S) GC							DRILL E	IT (S) SIZE	_	954019.01				
DEF	тнт	O WATE	Σ				-				6 in.	Project Number _ ELEVATION	TOTAL DEPTH				
ĪΩ	GEL	Not E	ncount	ere	<u>d</u>							DATE STARTED	26.5 ft.				
_	MAZ	K. Kn		-				_				3/25/96	3/25/96				
Driven	Recovered	Collected Space Reading	Depth (feet)		Li	itholog	7		USCS Log	Mumaeli Color	soi	IL DESCRIPTION AND	DRILLING REMARKS				
				X	X		X	紹			Concrete, 6 inches Background OVM: 0.0 ppm						
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	▓	8	-	₩	╟	Щ	Ш		ML		SILT: brown, minor sand and clay, firm, slightly moist						
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			20-	Ш	Ш			2	ML		Clayey SILT: brown, firm, sli	ightly moist	-				
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BOTING LOG BORING LOCATION		Kenn	ledy/Jenks Consultants						
Building 37, Pit L		Boring Name —	3L-2						
DRILLING COMPANY Gregg Drilling	DRILLER Jeff	Project Name	DAC C-6 Parcel A Phase II						
DRILLING METHOD (S) SIMCO 5000	DRILL BIT (S) SIZE 6 in.		954019.01						
DEPTH TO WATER Not Encountered		Project Number	TOTAL DEPTH						
LOGGED BY K. Knight		DATE STARTED	28 ft. DATE COMPLETED						
SAMPLES .		3/25/96	3/25/96						
Part of the part o	Nommed Color SO	IL DESCRIPTION AND	DRILLING REMARKS						
	Concrete, 6 inches Background OVM: 0.0 ppm								
	Bakground O v M: 0.0 ppm								
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5-11111111111 _{ML}	Sandy SHT, have - Con-	Sandy SILT: brown, fine, soft, dry to slightly moist							
1 +++++++++++++++++++++++++++++++++++++	Bottom of Machine Pit L	rt, dry to slightly moist							
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20- _{ML}	Clayey SILT: brown, firm, sli	Clayey SILT: brown, firm, slightly moist							
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	Silty SAND: light brown, find	e, loose, dry to slightly mo	ust						
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	Boring Completed at 28 feet		-						
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Buildir	1g 37.	Pit M				Roring Name	3M-1			
G COMPA	NY					_	DAC C-6 Parcel A Phase II			
G METHO	D(S)			DRILL BI	T (S) SIZE		954019.01			
O WATER					in.	Project Number _ ELEVATION	TOTAL DEPTH			
Not En	count	ered				DATE STARTED	DATE COMPLETED			
S. Bart	ling	1	7	Ţ		3/26/96	3/26/96			
Head Space Reading (mg/l.)	Depth (feet)	Lithology	USCS Log	Manuell Color	.	L DESCRIPTION AND	DRILLING REMARKS			
	10-		ML CL ML	2.5Y4/4 2.5Y5/4	Bottom of Machine Pit M Silty CLAY: olive brown, har	rd, dry, nonplastic				
	20-			2.5Y4/4 2.5Y5/4	— — — — — — — — —	· — — — — — — — — — — — — — — — — — — —				
	35-				Boring Completed at 28 feet.					
	Building COMPA Gregg is METHO MY WATER Not English S. Bart S. Sanda W. S. Bart S. Sanda W. S. Bart S. Sanda W. Sanda W. S. Sanda W. Sanda W. S. Sanda W. S. Sanda W. S. Sanda W. S. Sanda W. S. Sanda W. S. Sanda W. Sanda	GCOMPANY Gregg Drillin i METHOD (S) HSA Mobile WATER Not Encount BY S. Bartling S. Bartling S. Bartling S. Bartling 10-	Building 37. Pit M GCOMPANY Gregg Drilling is METHOD (S) HSA Mobile B-S3 DWATER Not Encountered BY S. Bartling S. S. S. C. S. E. S. S. S. S. S. S. S. S. S. S. S. S. S.	Building 37, Pit M GCOMPANY Gregg Drilling MATER Not Encountered BY S. Bartling S. Depth Library (ficet) 10- CL 15- MI 20- CL 35- MI 30-	Building 37, Pit M GOMPANY GOMPANY GOMPANY GOMETHOD (S) HSA Mobile B-53 DATER Not Encountered SY S. Bartling Solution Solution CCL SY4/4 15- CCL 2.5Y4/4 20- CCL 2.5Y4/4 25- ML 25-	Bullding 37, Pit M Group Drilling Jeff MacDido (S) HSA Mobile B-53 Not Encountered SS Bartling Sociol Links USC3 Links U	Bolting 77. Pk M Greek Drilling Greek Drilling Greek Drilling Greek Drilling Greek Drilling Greek Drilling Greek Drilling Greek Drilling Greek Drilling Greek Drilling Greek Drilling Greek Drilling Greek Drilling Greek Drilling Greek Drilling Greek Drilling Froject Name Project			

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	DRIL	LIN	Build G COM	ing 3	7, 1	Pit I	м_				DRILLER		Boring Name —	3M-2					
			Greg G METI	g Dril	llin	2	_					Jeff	Project Name	DAC	C-6 Parcel A	Phase II			
		LIN	HSA O WATE	Mobi	le]	B-5	3					TT (S) SIZE 6 in.	Project Number -	95401					
			Not I	R Incou	nte	red							ELEVATION		TOTAL DEPTH	26.5 ft.			
1	LOGO	GED	BY S. Ba										DATE STARTED 3/26/96		DATE COMPLETED				
X 27-202		AME	LES_													3/26/96			
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				15	5+					ML	2.5Y5/4	Clayey SILT: light olive brow	m, firm, friable						
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		Build	ing 37.	Pit M			Boring Name 3M-3							
DRI	LLIN	IG COME	ANY Drill			DRILLE	ER The Control of the							
DRI	LLIN	IG METH	OD(S)			DRILL	BIT (S) SIZE							
DEF	TH 1	O WATE	R	B-53			6 in. Project Number 954019.01 ELEVATION TOTAL DEPTH							
IOC	GEL	Not E	ncoun	tered			26.5 ft.							
		S. Bai	tling				DATE STARTED DATE COMPLETED 3/26/96 3/26/96							
	8	E =	Depth (feet)	Lithology	USCS Log	Mannell Color								
H	Reco	Collected Head Space Reading	E (LLL)		Log	Color	SOIL DESCRIPTION AND DRILLING REMARKS							
					CL.		Concrete, 6 inches - brown clay							
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			3		CL		Silty CLAY: olive brown							
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		×	10				Bottom of Machine Pit M							
		<u> </u>			CL	2.5Y4/4	Silty CLAY: olive brown, firm to hard, nonplastic, damp							
		ĺ	_			2.514/4	PID: 6.6 ppm ambient air							
			_		3		5.8 ppm at rig							
		ļ	15-		3									
			13		CL/ ML	2.5Y5/4	Silty CLAY/Clayey SILT: light olive brown, soft, nonplastic, dry							
9800	***				3	3.5 15/	PID: 5.1 bag sample							
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		1	20-		3									
			[20]		CL/ ML	2.5Y5/4	Silty CLAY/Clayey SILT: light olive brown, soft to firm, dry							
BOOK SE	3888				3	2.5 2 5 7	Sucy Charle Layey Sielf. light onive brown, soft to firm, dry							
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	×		د م		ML	2.5Y5/4	Clayey SILT: light olive brown, soft, dry, less clay, trace of sand PID 4.7 ambient air							
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		LOCAT Build		Pit N				Boring Name —	3N-1		
DR	Ш	Build vg COMI	ANY			DRILLER		_		C. 6 Parael A	Dhosa II
DR	LLI	NG METH	Drilli OD(S)			DRILL BI	Jeff T (S) SIZE	Project Name		C-6 Parcel A	Filase II
DEI	тн.	HSA TO WATE	Mobile R	B-53			6 in.	Project Number _ ELEVATION	95401	7.01 TOTAL DEPTH	
100	ZCE1	Not E	ncoun	ered	······································						27 ft.
		S. Ba	rtling					DATE STARTED 3/25/96		DATE COMPLETED	3/25/96
	E SAV	23.19 12	Depth (feet)	Lithology	USCS Log	Munseil Color	sor		DDT 1 D10		
Deliver	Recove	Collected Hoad Space Reading	(teet)		Log	Color	201	L DESCRIPTION AND	DKILLING	KEMARKS	
					3		Concrete, 6 inches				
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			٦		CL	2.5Y6/4 to 4/4	CLAY: with sand and silt, lig	ht yellow brown to olive	brown, dry,	soft	7
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	T	7	_		CL	2.5Y4/3	Silty CLAY: olive brown, fire	n, nonplastic, moist			
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		8			ML	2.5Y5/3	Clayey SILT: light olive brow	n, soft, moist			
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ВС	JRIN				p	it N					Boring Name 3N-2
DR	ш	INC	COMP	ANY						DRILLER	R
		D.C	Greg	Drill	ing	<u> </u>					Jeff Project Name DAC C-6 Parcel A Phase II
			METH HSA	∞(s) Mobile	e B	-53					6 in. Project Number 954019.01
DE	PT1	TC	HSA WATE	R							ELEVATION TOTAL DEPTH
LO	GGI	ED I	Not E	ncoun	ter	red					DATE STARTED DATE COMPLETED
L			S. Baı	tling							DATE STARTED DATE COMPLETED 3/25/96 3/25/96
	8	MEI	1	Dometr	T						
្	Recovered	lec te	Head Space Reading	Depth (feet)		1	Litholog	7	USCS Log	Mampell Color	SOIL DESCRIPTION AND DRILLING REMARKS
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	፠	X		12.					ML	2.5Y5/4	Clayey SILT: light olive brown, soft to firm, dry
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	❈	×		[``					ML	2.5Y5/4	Clayey SILT: light olive brown, soft to firm, with more clay in thin lenses
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Metacs			Build	ing 37	. Р	it O						Boring Name —	30-1						
å			G COMP	Drill	ling	E				DRILI	ER Jeff	Project Name	DAC	C-6 Parcel A	Phase II				
	ORIL	LINC	METH HSA	OD (S) Mobil	e R	_53	;			DRILL	BIT (S) SIZE 6 in.	Project Number -	95401		<u> </u>				
Ī	EPT		HSA WATE Not E							L	o m.	ELEVATION		TOTAL DEPTH					
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-0.000000	E .	Ě	Head Spave Roading	Dept (feet	;	1	Litholo	MO"	USC	S Manuell Color	SOI	L DESCRIPTION AND	DRII I ING	DEMARKS					
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F									ML	2.5Y5/4 to 4/4	Silty CLAY/ Clayey SILT: lig	th olive brown to olive t	brown, firm,	nonplastic, dry					
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Sugar		LOCATI Build	ing 37.	Pit O				Boring Name	30-2
DR	LLD	IG COMP. Gregg	ANY Drilli	ing		DRILLE	R Jeff	Project Name	DAC C-6 Parcel A Phase II
DR	LLD	ig meth	OD (S) Mobile			DRILL E	BIT (S) SIZE		954019.01
DEI	тнт	TO WATE	R				6 in.	Project Number - ELEVATION	TOTAL DEPTH
ια	GEI	Not E		tered				DATE STARTED	26.5 ft. DATE COMPLETED
	SAM	S. Bar		T	-	<u> </u>		3/26/96	3/26/96
Delven	Racovered	Collected Space Space Reading	Depth (feet)	Lithology	USCS Log	Manuell Color	soi	L DESCRIPTION AND	DRILLING REMARKS
					CT	10YR/3/6	Concrete, 6 inches Silty CLAY: fill, dark yellow	v brown, nonplastic	-
			5-		CL/ ML		- - - - -		
	2		10-		<u> </u>				1
		XXXX			ML	2.5Y5/6	Bottom of Machine Pit O Clayey SILT: light olive brov	vn, soft, dry	-
			15-		ML	2.5Y6/6	Clayey SILT: olive yellow, so	oft, dry, less clay	- - -
			20-		ML		Clayey SILT: as above		
	***		25-		ML		Clayey SILT: as above		· •
 			30-				Boring Completed at 26.5 fee	: t.	
-			35-			<u> </u>	.		
-			1			 - -			
.			40-			- - -			4
				olkist kannana asakhang m		-			

		ng 1			,	and the second control of the second	matiy delaya ka kanabah se esebi ina sesimin zaya kaya masa a mata a waxa se sa sa sa	Keni	nedy/Jenks Consultants				
		LOCATIO		ortion of Build	in≠ 37			Boring Name —	4				
DRI	LLIN	G COMP. Gregg	ANY	ortion of Build		DRILLER		_	DAC C-6 Parcel A Phase II				
DRI	LLIN	G METH	OD(S)			DRILL BIT		Project Name					
DEP	TH T	SIMC O WATER	<u>YO 500</u> R	0		6	in.	Project Number - ELEVATION	954019.01 TOTAL DEPTH				
IOG	GED	Not E	ncoun	ered		-		DATE STARTED	26.5 ft.				
	5 A M	K. Kn	ight				,	3/27/96	DATE COMPLETED 3/27/96				
Hiven	pecovered	Collected Space Reading	Depth (feet)	Lithology	USCS Log	Manuell Color	son	L DESCRIPTION AND	DRILLING REMARKS				
	= 1.5	JENES	1		ব		Concrete, 6 inches Background OVM: 0.0 ppm						
					CL —		- Silty CLAY: dark brown and gray, low plasticity, slightly moist						
		SXXXX	5		ML		Sandy SILT: brown, fine, firm, slightly moist						
-		XXXX	10-		MIL		Clayey SILT: dark brown, fir	m, slightly moist					
		ARK	15-		SM		Silty SAND: brown, fine, loose, slightly moist						
			20-		SM								
			25-		SM								
			30-				Boring Completed at 26.5 fe	et.					
			35-			- - - - -							
			40			-							

BORINGLOCAL						ACID	nedy/Jenks Consultants					
Buile	ding 61,	adjacent to n	orthern e	levator		Boring Name -	5A					
DRILLING COM Man	PANY ess			DRILLER P	ete	Project Name	DAC C-6 Parcel A Phase II					
DRILLING MET Geo	probe			DRILL BIT	(S) SIZE in.	Project Number _	954019.01					
DEPTH TO WAT: Not 1	er Encount	ered				ELEVATION	TOTAL DEPTH 36 ft.					
LOGGED BY J. Ki	night					DATE STARTED 4/5/96	DATE COMPLETED 4/5/96					
SAMPLES		Lithology	USCS Log	Munuell Color	gor.							
Driven Recovered Collected Head Space Space	(Ieet)		Log	Color	SOL	L DESCRIPTION AND	DRILLING REMARKS					
		<i>MATHHI</i>	\$		Concrete, 4"							
***	-											
	5-		CL		Silty CLAY: dark brown, mo	ist trace of coorse send	madium alastistu					
	-					ist, trace of coarse said,	- inequality					
	-				-		-					
	-				•		•					
	10-				-		-					
	10-		CL		brown, slightly moist, low pla	asticity	-					
-	_											
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× × ×							·					
	15-		ML	ŀ	Sandy SILT: brown, very fine	to fine. moist	-					
XXXXX				ŀ		vii, very line to line, moist						
				1	†							
					<u> </u>							
	20-	$\Pi\Pi\Pi\Pi\Pi$		· – – – <u>T</u>								
	20		ML	[Clayey SILT: brown, moist, trace of very fine sand							
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-				-			,					
		+16+46+46+4	H-H	+								
	25-		ML	-	Sandy SILT: brown, very fine	SILT: brown, very fine sand, trace of clay, moist						
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				ľ								
	30-			ļ.,,,,								
			ML									
				L			_					
				-								
	-			-			_					
	35-		ML	ŀ	some clay, slightly moist		-					
27001		шшшш										
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				ľ								
	40-			[Boring Completed at 36 feet.							
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1	RILL	ING COM	(PAN	Y	ad jac	ent to	0 501	uthern e	DRILLE		ì		Darcal A	Phoso II
Ī	RILL	Mar ING MET	HOD	(S)					DRILL B	Pete IT (S) SIZE	1			Fliase II
r	EPTH	Geo I TO WAI	prol ER	be	-					2 in.	Project Number ELEVATION	954019.0	L DEPTH	
1				ounte	red						DATE STARTED		COMPLETED	36 ft.
Ĺ		J. K	nigh	nt							4/5/96	DAIL	COMPLETED	4/5/96
	Recovered	Collected Head Space	MP/L)	Depth (feet)	1	Lithology	7	USCS Log	Munuell Color	so	IL DESCRIPTION AN	D DRILLING REA	MARKS	
	1	1012	٦		m	?	M	1		Concrete, 4"				
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				5-				I						_
Ě	₩		1	٦	Ш		Ш	ML		Sandy SILT: brown, very fir	ne to fine sand, moist			-
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-				4				1		-				-
	****			4	$\parallel\parallel\parallel$					-				_
				10-				ML		trace of clay				-1
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				\dashv						-				-
_8	***			- 1	Ш		Ш			-				-
	₩			15			Ш	ML		light brown, no clay, slightly	moist			-
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	▓	x		35-										
***		88	\perp		Ш	ШШ	Ш	ML		brown, very fine to fine sand	, very moist	· . · · · · · · · · · · · · · · · · · ·		
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J.				1						_ .				
				-						-				-8
1-				40-						Boring Completed at 36 fee	t.			-
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ewi ge	yan maliku	ensignates regions	erkensterr	owners.	(disserber		elingsveit							

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ВО	KINC	LOCAT	on de nor	the	ast (соп	er (of buildin	s 61		Boring Name —	6		
DR	ILLI	NG COM	ANY						DRILLER				17	
DR	пл	Mane NG METH	OD (S)						DRILL BI	Pete	Project Name	DAC C-6 Parcel A Pha	15e 11	
1		Geop	robe						2	in.	Project Number -	954019.01		
DE	PTH.	O WATE	R Incoun	ten	ed						ELEVATION	TOTAL DEPTH 26 fi		
10	GGE	BY									DATE STARTED	DATE COMPLETED		
Ŀ	SAN	J. Kn		_					7		4/1/96	4/1/9	6	
£	paua	Collected Head Music Reading	Depth (feet)		Li	itholog	7	USCS Log	Marmeli Color	SOI	L DESCRIPTION AND	DRILLING REMARKS		
Ě	Reco	Cole and September 1	<u> </u>	L										
				Î	M	ìM	ÌĤ	fil		Concrete, 4"				
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			1	711			Ш		1				-	
×	₩.	_	1	111						-			-	
	₩	7.0 5- _{ML} -								Sandy SILT: brown, very fin	e to fine sand, moist		-	
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	▓	3 7.1	10-	$\parallel \parallel$				ML					_	
※	ቖ	22		Ш	Ш	Ш		ML		trace of clay			_	
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				Ш	Ш		Ш						7	
	X	2			Ш	Ш	Ш			-			-	
	▓	7.3	15-		Ш	Ш	Ш	ML		light brown, no clay, slightly	moist			
			-	111	Ш		$\parallel \parallel$			_			-	
		1	-	Ш	Ш	Ш	Ш			_			-1	
			-	$\ \ $	Ш	Ш	Ш			-			-	
88	8		-	Ш	Ш		Ш			-			-4	
	▓	6.8	20-	Ш		Ш	Ш	ML		moist			-	
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			30-						.	Boring Completed at 26 feet	L .		-1	
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Kennedy/Jenks Consultants

		LOCATIO	n E			uprili sakku <u>a</u> gusa		VIII TURANI SA SA SA SA SA SA SA SA SA SA SA SA SA	7A	
DR	LLIN	Buildi:	NY			DRILLER		Boring Name —	DAC C-6 Parcel	A Phase II
DRI	LLIN	Grezg G METHO	D (S)	ığ		DRILL BIT	(S) SIZE	Project Name	954019.01	A LHASE II
DEI	тн т	Hydro O Water	,			1 2	in.	Project Number - ELEVATION	TOTAL DEPTH	
ī	GED	Not Er BY		ered				DATE STARTED	DATE COMPLETED	
	SAMI	J. Kni	T	[T 1		1	4/8/96		4/8/96
Drive	Recovered	Spare Reading (mg/l.)	Depth (feet)	Lithology	USCS Log	Manuell Color		L DESCRIPTION AND	D DRILLING REMARKS	
		5.3	10-		ML ML		Concrete, 4" Sandy SILT: brown, very fine sand, some clay, slightly moist decreasing clay, soft			
		6.5	20-		ML ML		slightly moist			- - - - - - -
			35-				Boring Completed at 26 fee	t.		

Kennedy/Jenks Consultants

BORING LOCA											
Bui	ldin	e 67					Boring Name ——7C				
DRILLING COL		r O rlllin				DRILLER	Project Name DAC C-6 Parcel A Phase II				
DRILLING ME	THOD	(S)	-				IT (S) SIZE				
Hyd DEPTH TO WA	lro I	ush					2 in. Project Number 954019.01 ELEVATION TOTAL DEPTH				
Not	Enc	ounte	red				26 ft.				
LOGGED BY							DATE STARTED DATE COMPLETED				
J. K SAMPLES	nigi	IE.				1	4/8/96 4/8/96				
Driven Recovered Collected Head Space	meding.	Depth (feet)	Li	ithology	USC3 Log	Munueli Color	SOIL DESCRIPTION AND DRILLING REMARKS				
			}}	YAAA	YA .		Concrete, 4"				
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-	- 1		$\mathbf{H}\mathbf{H}$				+				
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· ************************************	ا '	5	11111		ML		Clayey SILT: dark brown, slightly moist, trace of very fine sand				
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		4					<u> </u>				
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		4	ЩЦ	ЩЩ	₩	_	`				
• • • • • • • • • • • • • • • • • • •	8	10-									
		10			ML		Sandy SILT: brown, very fine sand, slightly moist, some clay				
	İ	- 7					,				
		- 1					1				
		- 1					-				
		4					-				
6.	2	15-			ML		decreasing clay, soft				
		- 1									
		1									
	-	1									
***	-	- 1			ML		dry, soft				
■ 6.2	2	20-					- ·				
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_ ₩₩₩ 6.3	3	25-]]]]]]]	ML		some clay, slightly moist				
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		- 1					Boring Completed at 26 feet.				
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				No especiales							

BOP		LOCAI	ION	_			'		IXCII)	nedy/Jenks (Jousuitants		
		Buile	ling (57					Boring Name	7 D	Made:		
· L.		G COM Gree	g Dri	llin	ıg		DRILI		Project Name		rcel A Phase II		
		G METI H yd i	o Pu	sh			DRILL	BIT (S) SIZE 2 in.	1	954019.01	1 HHOV 11		
7		O WATI Not I	R		ered				Project Number _ ELEVATION	TOTAL DEP			
LOCK	GED	BY J. Kn							DATE STARTED	DATE COME	36 ft.		
	AMP	1 ES	7			1			4/8/96		4/8/96		
Fa lea	Collected	Space Scading	E (fe	prin (T)	Lithology	USA Lo	E Color	SOIL DESCRIPTION AND DRILLING REMARKS					
		5.5 15- ML						Concrete, 4" Silty CLAY: dark brown, n Sandy SILT: brown, very fi		ce of clay			
		6.1	20			ML ML		slightly moist					
	88	6.0	30-			ML		Clayey SILT: dark brown, sli	ghtly moist, some very fine				
	\$: \$	8.0	35-	Ш		ML		brown, some sandy lenses			-		
			40-					Boring Completed at 36 feet			-		

BORING LOCATION	For more Eggs qui ach more		Kennedy/Jenks Consultants			
Outside northeast corner of F	ivilding 67		Boring Name —	8		
DRILLING COMPANY Maness	DRILLE	Pete	Project Name	DAC C-6 Parcel A Phase II		
DRILLING METHOD (S) Geoprobe	DRILL 1	BIT (S) SIZE		954019.01		
DEPTH TO WATER Not Encountered	***		Project Number .	TOTAL DEPTH		
LOGGED BY J. Knight			DATE STARTED	DATE COMPLETED		
SAMPLES			4/2/96	4/2/96		
manhall O D D D D D D D D D D D D D D D D D D	USCS Manned Color	SOIL DESCRIPTION AND DRILLING REMARKS				
		Concrete, 6"				
		-		•		
5 5 5 S	м	Silty SAND: dods hoosen and				
		Silty SAND: dark brown, ver	y time to line, moist, wi	un lenses of medium sand		
		}		-		
		}		-		
10-		 				
10 10 M	L	Clayey SILT: dark brown, ver	y moist, trace of mediu	m to coarse sand		
F				-		
		_		-		
		L				
15- M	L	Sandy SILT: brown, very fine	to fine, moist, with pod	s of dry gray clay		
				-		
		-		-		
- ₩₩₩ 1		-		-		
20-		-		-		
				-		
				-		
- ₩ -				- 1		
25- MI		slightly moist, some clay	-			
		-		-		
		Boring Completed at 26 feet.		-		
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30-		•				
		•		4		
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35-				-		
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	 			4		
40-	 			-		
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		LOCAT	ros ros				The Angle State St		Keni	nedy/Jenks Cons	sultants	
À		Nort	heast o	<u>cor</u>	ner of Buildi	ng 67			Boring Name	_11A		
DRI	ILLI	NG COM Man	PANY ess				DRILLER	Pete	Project Name	DAC C-6 Parcel	A Phase II	
DRI	ILLD	IG METI	HOD (S) robe	1			DRILL BE	r (s) size			A I HASC II	
DEF	тн	TAW O	R	_				in.	Project Number ELEVATION	954019.01 TOTAL DEPTH		
LOC	GGEI	Not I	incou	nte	red				DATE STARTED		26 ft.	
_	SAM	J. Kr	ight	_					4/4/96	DATE COMPLETED	4/4/96	
u,	povered	Collected Space Reading	Dept (feet	a	Lithology	USCS Log	Mamacil Color	SOIL DESCRIPTION AND DRILLING REMARKS				
百	\$.	S = 5.2	<u> </u>	-	~~~~	.		Concrete, 4"				
		4.1	4			CL		Silty CLAY: dark brown, moist, low plasticity			-	
		5.1	10			ML		Sandy SILT: brown, very fine	e to fine, slightly moist			
		5.3	15			ML		light brown, some clay, dry, h	ard		-	
		5.5	20-			ML	-					
		5.4	25-			ML		no clay, increasing sand conten	at .		_	
			30-				-	Boring Completed at 26 feet.				
-			40-				- - - - - -				-	

Boring Log		Kennedy/Jenks Consultants	•
BORING LOCATION Northeast corner of Building 67 DRILLING COMPANY		Boring Name 11B	
Maness	DRILLER Pete	Project Name DAC C-6 Phase II	
DRILLING METHOD (S) Geoprobe	DRILL BIT (S) SIZE 2 in.	Project Number 954019.01	
DEPTH TO WATER Not Encountered		ELEVATION TOTAL DEPTH 26 ft.	
LOGGED BY J. Knight		DATE STARTED DATE COMPLETED 4/4/96 4/4/96	
SAMPLES	Manuell Color		
Depth (feet) Lishedogy USCS Log		SOIL DESCRIPTION AND DRILLING REMARKS	
	Concrete, 4*		
	-		-
5.2 5- CL	Silty CLAY: dark	brown, slightly moist, medium plasticity	-
		:	-
	[•	-
5.7 10-	 		
5.7 10-111111111ML	Clayey SILT: brow	wn, trace of very fine sand, dry, hard	-
i			-
	<u> </u>		
6.2 15- ML	Sandy SILT: brown	n, very fine to fine sand, slightly moist	_
			-
			-
	-		-
6.0 20-	dry		
	-		4
			. 1
6.2 25-	some clay, slightly	moist	
	Paris Constant	1 11 20 6 11	-
.	Boring Completed	1 31 20 IEC.	- Francisco
30-	<u> </u>		
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BORING LOCATION Adjacent to above ground tanks (building	43)	Boring Name 12A			
DRILLING COMPANY Maness	DRILLER				
DRILLING METHOD (S)	Pete DRILL BIT (S) SIZE	051010			
Geoprobe DEPTH TO WATER	2 in.	Project Number 954019.01 ELEVATION TOTAL DEPTH			
Not Encountered LOGGED BY		DATE STARTED DATE COMPLETED			
J. Knight		4/5/96 4/5/96			
	Aunsell Color SOII	L DESCRIPTION AND DRILLING REMARKS			
5-1 ML	Clayey SILT: dark brown to b	Clayey SILT: dark brown to black, moist, some very fine sand			
10	Sandy SILT: brown to black,	very fine to fine sand, slightly moist, with clay			
15-	brown, moist	brown, moist			
20-	no clay				
25-111111111ML	-				
30-	Boring Completed at 26 feet.	•			
35-					
40-	- - - -				

	ORING LOG ORING LOCATION Adjacent to above ground tanks (building 43) RILLING COMPANY DRILLER RILLING COMPANY RILLING C											
BORING LOCATI	ON	hove ground to	-l (1-11	(3! 42)		77	12B	·				
		PONE BLOGING 13	<u>uiks (001)</u>			Boring Name ——						
Mane DRILLING METH	33			P	ete	Project Name	DAC C-6	Parcel A	Phase II			
Geop	obe			DRILL BIT	in.	Project Number _	954019.01					
DEPTH TO WATE	ncounte					ELEVATION	TOTA	L DEPTH	262			
LOGGED BY		irea				DATE STARTED	DATE	COMPLETED	26 ft.			
J. Kni	ght		7	45.200		4/5/96			4/5/96			
Delven Recovered Collected Spece	Depth (feet)	Lithology	USCS Log	Muraell Color	SOIL DESCRIPTION AND DRILLING REMARKS							
4.7	5-		ML.		Clayey SILT: dark brown, so Silty CLAY: dark brown, mo	· 	i, trace of fine gra	vel, moist				
6.6	20-		ML ML		Sandy SILT: brown, very fine		oist, slight diesel c	— — — — odor				
	30-				Boring Completed at 26 feet	L			-			
F	40-			-					-			

			ATION						12C			
		Ad		it to s	bove ground ta	nks (bu	ilding 43) DRILLER		Boring Name —	_12C_		
1		Ms	iness				P	ete	Project Name		C-6 Parcel A	Phase II
		Ge	THOI opro)(S) be			DRILL BIT	in.	Project Number _	95401		
DEP	TH:	TO WA		ount	ered				ELEVATION		TOTAL DEPTH	26 ft.
IO	GEI	DBY	Knig						DATE STARTED		DATE COMPLETED	
	SÄY	(PLES						l	4/5/96			4/5/96
Deliver	COVER	Collected	FF.	Depth (feat)	Lithology	USCS Log	Marmeli Color	SOI	L DESCRIPTION AND	DRILLING	G REMARKS	
	2	Ø ±3	75.	5-		CL CL		Silty CLAY: dark brown, slig	ghtly moist, with organic	e material		
				15-		CL		moist, medium plasticity				-
		****		20-		ML		Sandy SILT: dark brown, ver	y fine to fine, slightly m	oist		
		×		25-		ML	ļ	Clayey SILT: brown, slightly	moist, trace of very fine	sand		_
				30-				Boring Completed at 26 fee	£.			

BORING LOCATION Building 29	Boring Name 13A					
DRILLING COMPANY DRILLER	Project Name DAC C-6 Parcel A Phase II					
DRILLING METHOD (S) DRILL BIT	in. Project Number 954019.01					
DEPTH TO WATER Not Encountered	ELEVATION TOTAL DEPTH 26 ft.					
LOGGED BY	DATE STARTED DATE COMPLETED					
J. Knight	4/4/96 4/4/96					
Depth Listedogy USCS Married Color P 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SOIL DESCRIPTION AND DRILLING REMARKS					
	Concrete, 4"					
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4.7 5- _{ML}	Clayey SILT: dark brown, trace of very fine sand, slightly moist					
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4.9 10-						
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5.2 15- _{ML}	Sandy SILT: brown, very fine sand,, slightly moist					
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5.6 20-	CI CITTLE III.					
3.5 20]	Clayey SILT: brown, slightly moist					
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5.6 3.5 MIL						
5.6 25-						
-	Boring Completed at 26 feet.					
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В	ORING	LOCATIO Buildir						Boring Name —	13B		
DI	RILLIN	IG COMPA	NY			DRILLER		_	DAC C-6 Parcel	A Phose II	
DI	RILLIN	Manes G METHO	D(S)			DRILL BIT	ete (S) SIZE	Project Name		A I HASE II	
8		Geopre O WATER	obe		-		in.	Project Number _	954019.01 TOTAL DEPTH		
1		Not En		ered						26 ft.	
L	OGGE	BY J. Knig	ht					DATE STARTED 4/5/96	DATE COMPLETED	4/5/96	
F		PLES	1						· · · · · · · · · · · · · · · · · · ·		
E PL	Kovere	Collected Space Reading (mg/L)	Depth (feet)	Lithology	USCS Log	Munnell Color	SOIL DESCRIPTION AND DRILLING REMARKS				
٩	~	0 =%=5	1	^^^			Concrete, 4"				
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	₩	×	5-		ML		Clayey SILT: mottled light a	nd dark brown, moist		-	
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░	₩	8	10-		CL		Silty CLAY: dark brown, mo	ist, medium plasticity			
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	₩	X	15-		ML		Sandy SILT: brown, very fine	e sand, slightly moist		-	
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	₩	X	20-		ML	 	trace of clay, moist			-	
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BORING	LOCATION Buildin	v v 29				Boring Name 14				
DRILLING	G COMPAI Maness	NY			DRILLER	ete	Project Name	DAC C-6 Parcel A Phase II		
DRILLING	G METHOI	D(S)			DRILL BIT	(S) SIZE	Project Number	954019.01		
DEPTH TO	Geopro WATER		·			in.	ELEVATION		TOTAL DEPTH	
LOGGED	Not En	count	ered				DATE STARTED		DATE COMPLETED	26 ft.
SAMP	J. Knig	ht	T	1			4/5/96			4/5/96
Driven Recovered	Head Space Reading (mg/f.)	Depth (feet)	Lithology	USCS Log	Manuell Color	so	IL DESCRIPTION AND	DRILLING	REMARKS	
	6.5 5 CL S.5 10-					Concrete, 18" Silty CLAY: dark brown, me		ly moist		
	KXXXI	20-		ML ML		no clay				
	2	25-		ML		Clayey SILT: brown, moist				-
		30-				Boring Completed at 26 fe	et.			

Boring Name Determinated Boring Name Determination D	1000			ıg L			t to the state of			eternological consus and service and service		enks Consi	
DELLING COMPANY MALENTA MALENT MALE	В	RINC				dines 29 and 33	3		Boring Name	_15		•	
DIRLLANGUAGE GEORGE GEORGE GEORGE GEORGE GEORGE TO NAVER NO RECOGNICATE NO RECOGN	DRILLING COMPANY DR.									_			
Georgete 2 in Project Number 25-241/105 TOTAL DEPTH DATE COMPLETED ALL SAME SOIL DESCRIPTION AND DRILLING REMARKS SOIL DESCRIPTION AND DRILLING REMARKS Likelit Soil Likelit S	DRILLING METHOD (S) DR							DRILL BIT	ete (S) SIZE				<u> </u>
Note Encountered LOCADE PY LOCA	Geoprobe 2 in.									Project Number _	95401		
Likelight 1956 47196 Likeling 1950 155 155 155 155 155 155 155 155 155 1	DI	PIH			counte	ered						26 ft.	
SOIL DESCRIPTION AND DRILLING REMARKS Concrete, 4* Concrete, 4* Silty CLAY: dark brown, moist, some very fine and Sandy SILT: brown, very fine sand, some clay, moist Very fine to fine sand, no clay 6.2 20 CL Silty CLAY: dark brown, moist, micaccous Silty CLAY: dark brown, wery fine sand, moist Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	Ц	GGE			L .4						DATE COMPLETED	A11106	
Silty CLAY: dark brown, moist, some very fine sand Sandy SILT: brown, very fine sand, some clay, moist Very fine to fine sand, no clay Silty CLAY: dark brown, moist, micaceous Silty CLAY: dark brown, moist, micaceous Silty CLAY: dark brown, moist, micaceous Silty CLAY: dark brown, wery fine sand, moist Boring Completed at 26 feet.	SAMPLES									4/1/90		f	4/1/30
Silty CLAY: dark brown, moist, some very fine sand Sandy SILT: brown, very fine sand, some clay, moist Very fine to fine sand, no clay Silty CLAY: dark brown, moist, micaceous Silty CLAY: dark brown, moist, micaceous Silty CLAY: dark brown, moist, micaceous Silty CLAY: dark brown, wery fine sand, moist Boring Completed at 26 feet.	٤	Da.	orted	2 2 4 C	Depth (feet)	Lithology	USC3 Log	Musseil Color	SOI	L DESCRIPTION AND	DRILLING	REMARKS	
5.7 5 CL Silty CLAY: dark brown, moist, some very fine sand Sandy Sil.T: brown, very fine sand, some cizy, moist Very fine to fine sand, no clay 5.4 15 CL Silty CLAY: dark brown, moist, micaceous Silty CLAY: dark brown, wery fine sand, moist Boring Completed at 26 feet.	É	3	3	HONE E		***			Concenta 4ª				
Sandy SILT: brown, very fine sand, some clay, moist Sandy SILT: brown, very fine sand, some clay, moist very fine to fine sand, no clay Silty CLAY: dark brown, moist, micaceous Silty CLAY: dark brown, moist, micaceous Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	-					THINING S			Concrete, 4				
Sandy SILT: brown, very fine sand, some clay, moist Sandy SILT: brown, very fine sand, some clay, moist very fine to fine sand, no clay Silty CLAY: dark brown, moist, micaceous Silty CLAY: dark brown, moist, micaceous Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.									-				
Sandy SILT: brown, very fine sand, some clay, moist Sandy SILT: brown, very fine sand, some clay, moist very fine to fine sand, no clay Silty CLAY: dark brown, moist, micaceous Silty CLAY: dark brown, moist, micaceous Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	0.000												
Sandy SILT: brown, very fine sand, some clay, moist Sandy SILT: brown, very fine sand, some clay, moist very fine to fine sand, no clay Silty CLAY: dark brown, moist, micaceous Silty CLAY: dark brown, moist, micaceous Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.													
Sandy SILT: brown, very fine sand, some clay, moist Sandy SILT: brown, very fine sand, some clay, moist very fine to fine sand, no clay Silty CLAY: dark brown, moist, micaceous Silty CLAY: dark brown, moist, micaceous Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	*	₩,	×										
Sandy Sill: brown, very line sand, some city, moist very fine to fine sand, no clay 6.2 20 CL Silty CLAY: dark brown, moist, micaceous 6.4 25 ML Sandy Sill: light brown, very fine sand, moist Boring Completed at 26 feet.	×	₩	羉	5.7	51		CL		Silty CLAY: dark brown, mo	ist, some very fine sand			
Sandy Sill: brown, very line sand, some city, moist very fine to fine sand, no clay 6.2 20 CL Silty CLAY: dark brown, moist, micaceous 6.4 25 ML Sandy Sill: light brown, very fine sand, moist Boring Completed at 26 feet.	*				-				-				•
Sandy Sill: brown, very line sand, some city, moist very fine to fine sand, no clay 6.2 20 CL Silty CLAY: dark brown, moist, micaceous 6.4 25 ML Sandy Sill: light brown, very fine sand, moist Boring Completed at 26 feet.	-				-				Ť				
Sandy Sill: brown, very line sand, some city, moist very fine to fine sand, no clay 6.2 20 CL Silty CLAY: dark brown, moist, micaceous 6.4 25 ML Sandy Sill: light brown, very fine sand, moist Boring Completed at 26 feet.	-				-				<u> </u>				
Sandy Sill: brown, very line sand, some city, moist very fine to fine sand, no clay 6.2 20 CL Silty CLAY: dark brown, moist, micaceous 6.4 25 ML Sandy Sill: light brown, very fine sand, moist Boring Completed at 26 feet.	×	₩.			-		 +						
5.4 15 ML very fine to fine sand, no clay 6.2 20 CL Silty CLAY: dark brown, moist, micaceous 6.4 25 ML Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	×	₩		6.0	10-		MI.		Sandy SILT: brown very fin	e sand, some clay moist			
6.2 20 CL Silty CLAY: dark brown, moist, micaceous Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	ॐ	XX.	~		4				-	o onine only, mone			
6.2 20 CL Silty CLAY: dark brown, moist, micaceous Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	-		ļ		4				-				
6.2 20 CL Silty CLAY: dark brown, moist, micaceous Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.									-				
6.2 20 CL Silty CLAY: dark brown, moist, micaceous Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.			- 1										
6.2 20 CL Silty CLAY: dark brown, moist, micaceous Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	**	▓.	8										
6.4 25 ML Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	፠	₩	▩	3.4	157		ML		very fine to fine sand, no cla	y			•
6.4 25 ML Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.					1				-				•
6.4 25 ML Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	-				- 1				•				•
6.4 25 ML Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	1				1								
6.4 25 ML Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	×	\otimes	╛				+	· – – –					
6.4 25 ML Sandy SILT: light brown, very fine sand, moist Boring Completed at 26 feet.	×			6.2	20		CL		Silty CLAY: dark brown, mo	ist, micaceous			•
Boring Completed at 26 feet.	**	**			-				•	,			•
Boring Completed at 26 feet.	-				-			Î	<u>-</u>				
Boring Completed at 26 feet.	-				-				_				
Boring Completed at 26 feet.		,,,,	ŀ		-								
Boring Completed at 26 feet.	፠	▓	×	6.4	25-		ML		Sandy SILT: light brown, ver	y fine sand, moist			
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BORING		ocatioi B uildin						Boring Name ——	16		
DRILLI	NG	COMPAI Manes	NY			DRILLER	ete	Project Name	C-6 Parcel Phase II		
DRILLI	NG	METHO	D (S)	· · · · · · · · · · · · · · · · · · ·	-	DRILL BIT	(S) SIZE	Project Number	95401		
DEPTH '	то						in.	ELEVATION		TOTAL DEPTH	
LOGGE	D B	Not En	count	ered				DATE STARTED		26 ft. DATE COMPLETED	
.	MPL.	J. Knig	ht		<u> </u>		1	4/2/96		4/2/%	
	_	Heod Space Reading (mg/f.)	Depth (feet)	Lihology	USCS Log	Manuell Color	SOIL DESCRIPTION AND DRILLING REMARKS				
	××		5-		CL		Concrete, 8" Silty CLAY: dark brown, mo	oist, trace of coarse sand, 1	inedium pla	sticity	
	***		10- -		CL		brown, slightly moist, low p	lasticity			
	***		15-		ML		Sandy SILT: brown, very fin	e to fine, moist			
	***		20-		ML		Clayey SILT: brown, moist,	trace of very fine sand			
	*		25-		ML		Sandy SILT: brown, very fin	e sand, trace of clay, mois	t	-	
			30-				Boring Completed at 26 fee	et.			
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Poling						Keni	ledy/Jenks Consultants			
BORING LOC.		uilding 36				Roring Name	17			
DRILLING CO	MPANY iness			DRILLER	Dolling I value					
DRILLING ME	THOD (S)			DRILL BIT	(S) SIZE					
DEPTH TO WA	oprobe TER			2	in.	Project Number	954019.01 TOTAL DEPTH			
Not LOGGED BY	Encour	ntered				DATE STARTED	26 ft.			
J. I	Cnight					4/1/96	DATE COMPLETED 4/1/96			
Driven Recovered S Collected S Season	Dept (Cee	Lithology	USCS Log	Marmell Color	son	SOIL DESCRIPTION AND DRILLING REMARKS				
6	.9 4		ML ML		Asphalt, 2" Concrete, 20" Sandy SILT: brown, very fine moist	, slightly moist, some cl	ay			
5.			ML ML		increasing sand content, very f	ine to fine, with dark br	own clayey lenses			
	35-				Boring Completed at 26 feet.					